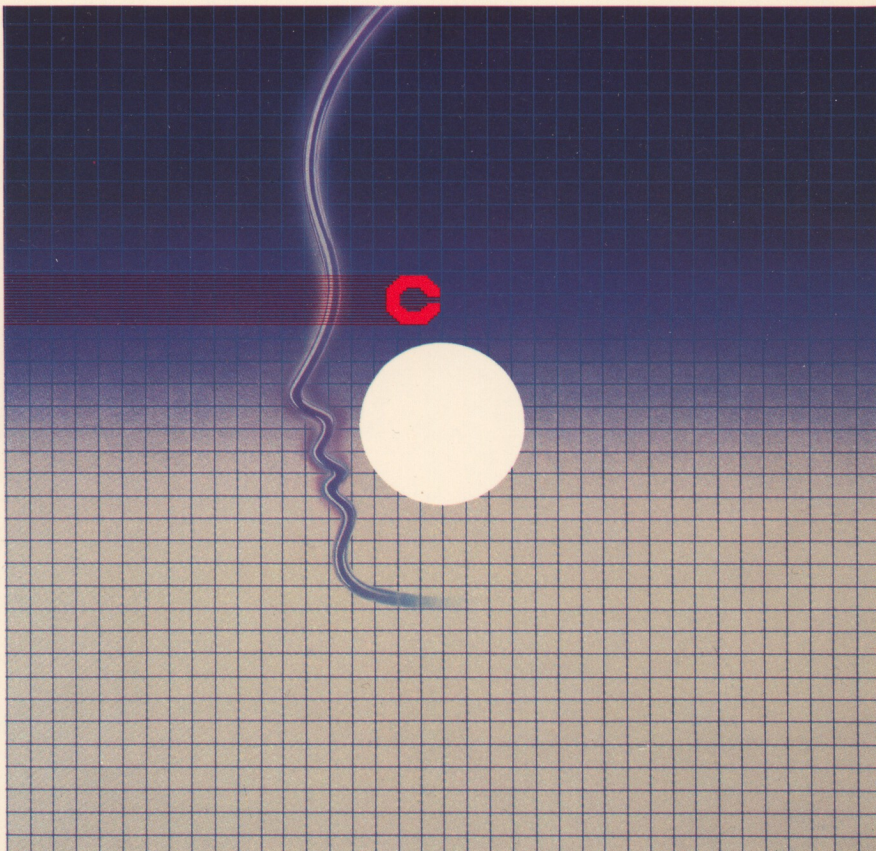


Steve Adams

PERSONAL FINANCIAL PLANNING



with **THE HOME ACCOUNTANT**

**Personal Financial Planning
with
The Home Accountant**

**by
Steve Adams**

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Introduction

In 1890, George Washington Vanderbilt began work on his estate in the mountains of North Carolina, near Asheville. It took 1,000 workers, working with materials shipped in on a private railroad spur, five years to complete the massive house, built in the style of the great sixteenth century French chateaux. It sat on an estate of some 125,000 acres, and even the floor space of the great house alone had to be measured in *acres*. The grounds were landscaped by Frederick Law Olmsted, designer of Central Park. Vanderbilt established a forestry division and a farming division, and at the foot of the hill he built a village for his workers. It was as if he were trying to establish a barony.

Biltmore House was built with family money, not with income. The proprietor's grandfather was Cornelius Vanderbilt, a crusty old robber baron who made his fortune in shipping and railroads and kept his accounts in his head. The Commodore was a parvenu, socially shunned in the Astors' parlor. Two generations later, the family fortune had acquired the gentility of time. (Not coincidentally, Nelson Rockefeller's fortune came from the same era; it was accumulated by his father, John D., and Standard Oil.)

All but 8,000 acres of the Biltmore Estate was given to the government after George Vanderbilt died in 1914. In 1930, the house was opened to the public. As Eliza Doolittle (a more charming parvenu than the Commodore) might have put it: some say it was the income tax what done 'im in. (As someone else once said, the income tax is a form of capital punishment.)

George Vanderbilt's estate was a magnificent anachronism. In the era of Chambord and Blois, after which Biltmore was modeled, property was the measure of wealth. Wealth was owned rather than earned. There was no such thing as upward mobility. The modern concept of income, historian Daniel Boorstin points out, did not arise until the nineteenth century. It—along with income tax and accountants—is as much a result of the industrial revolution as the Vanderbilt fortune. Not until 1913 did the Sixteenth Amendment allow the modern income tax; Barrow, Wade, Guthrie, and Co., established in New York in 1883, was probably the first American accounting firm.

Few of us achieve financial security the old fashioned way, by being born to it; we have to earn it. The object of financial planning is to set aside funds for investments that will work for us while we're on the golf course and to keep the taxman from doing us in. Without actually cheating, of course.

Want to make a million? If you and your spouse put \$4,000 a year into an Individual Retirement Account at 10% interest for thirty-five years, you'll retire with a nest egg of nearly \$1.1 million. You could withdraw more than \$100,000 a year without touching the principal. Of course, if inflation averages 6% a year, your investment will be worth only a little over \$140,000 in current dollars, and your annual income will be one-tenth of that. On the other hand, how much would you have if you hadn't put that money aside?

That's the last million-dollar scheme you'll find in this book. There are no reliable ways to get rich quick—not even writing books on personal financial planning. This book is about managing money the old-fashioned way, with a couple of new wrinkles: your computer and *The Home Accountant*. *The Tax Advantage* dovetails with *The Home Accountant* to simplify tax preparation and planning. If you have a spreadsheet program, you will also be able to put it to good use. In a pinch, a pocket calculator and a legal pad are sufficient, however.

Accounting, in fact, has remained basically the same since Fra Luca Pacioli, an Italian monk, invented the double-entry system two years after Columbus arrived in the New World. The proverbial bottom line of the balance sheet is actually not profit but an equation: $\text{Assets} = \text{Liabilities} + \text{Net Worth}$. Or, by simple algebraic permutation, $\text{Net Worth} = \text{Assets} \text{ minus } \text{Liabilities}$. Everything else is in service of that equation. The double-entry system simply means that whatever goes out has to come from somewhere. To credit one account, you must debit another. That's about all there is to it: debit and credit, debit and credit, debit and credit.

Naturally, the system of debits and credits becomes rather elaborate if you're keeping books for IBM. It's not for nothing that CPAs go to school for ages and take rafts of exams. Most of our personal affairs, however, are not so complicated that we need accounting degrees to straighten them out. In fact, as you develop your own record-keeping system, budget, and financial goals, you should keep in mind a single imperative: simplify. An overly elaborate budget with dozens of spending categories will do you no good if it's so complicated it discourages you from using it.

There is an analogy between running a business and home accounting. But the objectives of a business are pretty straightforward and single-minded: to make money. At home, the goal of accumulating assets is offset by lifestyle considerations. I'll offer guidelines where appropriate, but this book's primary objectives are to help you see the questions and to weigh the trade-offs.

If economics is the dismal science, accounting may at first seem to be its dreariest and most arcane aspect. *The Home Accountant* takes the drudgery out of keeping up with the endless stream of debits and credits by applying the capabilities of the computer to the medieval science of accounting. Number crunching is what computers do. (Even in word processing, letters must be converted to numbers before the computer can proceed.) The humble home computer crunches numbers faster and more accurately than a monastery full of monks armed with Xerox copiers and desk calculators.

The Home Accountant helps you toward your goal of simplicity by automating the double-entry system. A single entry takes care of both the debit and the credit. Once you've set up your budget, you'll be able to keep up with your income and spending more effectively than you could on paper with little more effort than it takes to reconcile your checkbook with your bank statement every month.

The object of accounting is control and planning. *The Home Accountant* can generate a lot of numbers that most people don't have at their fingertips. These numbers are helpful for more than balancing checkbooks and controlling spending. They can help you plan tax strategies, fill out your returns, and, if it comes to that, survive an audit. You will have the basic data you need to obtain credit and to determine whether you can afford it. You will be able to figure out whether your long-term goals are feasible and to plan your investments so you can reach those goals. And you will be better able to cope with the financial stress of major life changes: marriage, divorce, having kids, college, retirement, and so on. As the chief executive of a \$40 million company put it the other day, "The good news is now I know where the money's going. The bad news is I'm sick about it." Here's how to heal thyself.

The book is heavily oriented toward number crunching, probably more so than most home finance books, because that's what *The Home Accountant* and *The Tax Advantage* do. You won't find advice about how to buy hamburgers and save money on cars.

With a computer and *The Home Accountant*, the tedium of accounting becomes almost like a strategy game. You plan, execute, and tote up the score. (How'm I doin', coach?) So: let's start playing.

Editors Note:

The Home Accountant can mark files for use by *The Tax Advantage* to prepare federal income tax returns. The method described in this book was in use through 1984. New versions of *The Home Accountant* use a slightly different method. In the past *Home Accountant* files to be read by *Tax Advantage* had to share a matching category name with *The Tax Advantage* files and to have the extension "T." Now, you can use any category name you want, but the two programs must share the same file name extension, a three-digit number. This way, the amount from the appropriate *Home Accountant* categories will be posted to the correct line in *The Tax Advantage*.



1 WHAT FINANCIAL ADVISERS DO: GETTING STARTED

This is a do-it-yourself book. If you want professional advice, it's there for the buying. There are about 100,000 financial planners out there ready to take your money in return for the promise to help you make money. Like doctors, lawyers, and psychiatrists, they run the gamut from bona fide experts to those who finished last in their class. You can do for yourself most of the things financial planners do, and realize a considerable savings in fees for your efforts. Many planners charge by the hour. Even if you seek professional advice, you may be able to reduce the cost significantly by laying the groundwork at home.

Financial planners are professionals who assist with your overall planning from budgeting to investing; accountants and stockbrokers, on the other hand, are specialists. Some financial planners are specially trained; others are essentially insurance salespeople, securities brokers, and investment bankers. Specialists who sell nothing but their services claim objectivity. Salespeople claim to offer a fuller range of services. If your planner works on commission however, he has a strong motive unrelated to your financial well-being: to sell particular financial products.

At least ten American schools offer specialties in financial planning or business management. Relatively recently, two designations have emerged for planners who have completed educational programs—Chartered Financial Consultant and Certified Financial Planner. The major professional groups are the International Association for Financial Planning in Atlanta and the College for Financial Planners in Denver. The latter has 17,000 students and offers a two-year course leading to the CFP designation.

Eventually, you are sure to work with some kind of financial professional, who may or may not actually hang out a shingle as a financial planner per se. You will deal with bankers, for example. Many banks now offer personal financial planning and investment services, usually in packages intended for their more affluent customers. You cannot buy and sell stock except through a broker, unless you can afford a \$400,000 seat on the New York Stock Exchange. Some brokerage houses now have full-service financial planning departments. Naturally, these advisers are oriented toward securities. In some cases, stock commissions may be deducted from planning fees. You buy insurance from an agent. And you may seek the services from time to time of an accountant, lawyer, or tax expert.

If you are among the more affluent, there are investment counselors who will manage your money for you. Typically, they make transactions on your behalf without seeking your approval for each one. The minimum stake, however, may be anywhere from \$100,000 to \$250,000. Such consultants

typically charge a management fee of about 1% of your portfolio. You will also have to pay brokerage commissions.

Mutual funds are the middle-class person's answer to professional investment management. Your portfolio is not managed to your personal specifications, of course; you must choose a fund whose strategy matches your needs.

You should select a financial planner or other financial professional with the same care you choose a physician. Personal referrals are the best method. Your banker, accountant, broker, or attorney may be able to provide referrals to firms with which they work. You can also obtain names from the Yellow Pages or from professional associations.

Most financial planners, who help organize and plan your overall financial affairs, do basically the same thing. They ask you about your earnings, spending, financial goals, and allowable risk in investments. You fill out lots of forms, possibly accumulating a sheaf fifty pages thick. These deal with budget, savings, taxes, investments, insurance, and estate planning. You tote up your assets and liabilities to discover your net worth and measure income against spending. All of this is aimed at setting realistic financial goals and getting from here to there. This means planning for retirement and your children's education, and setting up a program of health, life, and disability insurance to provide financial protection against disaster. After that, your spending goals—cars, boats, houses, scuba diving trips to Cozumel—are up to you. Meeting these goals is simply a matter of determining how much money you will need and when, and calculating how much you must set aside on a regular basis to arrive at that figure.

A good financial planner can help lead the way through the tangled and confusing world of finance. The price, unfortunately, can be quite high. The fee can range from a couple of hundred dollars to several thousand. *The New York Times* quotes one adviser as proposing to charge his clients 5% of their income. Unless you're managing a large sum of money, you'd have to get some pretty fancy advice to profit from even the best advisers.

This is not to say that advice is not a good investment. For many people it is, particularly if they are well-to-do or have unusually complicated financial lives. But, for most folks, it's probably difficult to come out ahead with an adviser whose fees are at the upper end of the range. Five percent is more than many families save regularly.

Getting Started

One thing financial planners do offer is a structured environment for financial planning. With a little self-discipline, however, you can improve your financial planning on your own. A computer, *The Home Accountant*, and perhaps a few other programs make the job much easier. The return on the effort is several hundred to several thousand dollars in savings on fees, right off the bat. Not a bad start.

If you're going to do this yourself, you have to provide your own structure. You need access to various financial records. If you store your important records hither and thither—in a shoe box in the desk, in the drawer of the dining room buffet, in a liquor box in the closet, and in the safe deposit box at the bank—a little organization at the outset can save a lot of time later. And, not to be morbid about it, have pity on your survivors if you should die unexpectedly. If your financial affairs are organized solely in your head, your demise may bring them an unholy mess, as well as grief.

While the need for keeping certain records accessible is obvious, it may not be so clear with others at first. Military discharges and marriage certificates, for example, may be necessary to obtain some death benefits. Life insurance benefits cannot be claimed without the policy, and survivors may not be aware that the policy exists. A car cannot be sold without the title. While the department of motor vehicles can supply a duplicate, the wheels of the bureaucracy often grind frustratingly slow. Billions of dollars have moved from abandoned or forgotten bank accounts to state treasuries because their owners could not be found. You need records of purchase prices and dates for stocks, bonds, and other investments to compute capital gains taxes when they are sold. You also need records of expenditures for home improvements for the same purpose. Records of medical bills and treatment are helpful for preparing your tax returns and for filing insurance claims (if your doctor does not do this for you).

Many important papers you do not use frequently should be kept in a safe deposit box at your bank. In most states, however, banks seal safe deposit boxes when an owner or joint owner dies. They are opened only when legal and tax matters are disposed of or when the bank receives legal permission. Therefore, you should keep papers that will be crucial to the settlement of your estate elsewhere. The original copy of your will should be in the files of the lawyer who drew it up. Insurance policies should be kept at home, since a policy must be surrendered to the insurance company for survivors to claim the benefits. Papers that should be kept in a safe deposit include stocks and bonds; records of births, marriages, divorces, adoptions, and deaths; military discharges; contracts; passports; and real estate deeds and automobile titles. Most other records should be kept in a safe place at home.

Financial planning requires organization and recordkeeping. Making a financial inventory is a good place to start. Such an inventory should include bank accounts, stocks and other investments, wills and other important

papers, insurance policies, annuities and retirement plans, mortgages and other loans, attorneys and other professional advisers, doctors, real estate holdings, and any other pertinent information. The location of records, account numbers, names of contacts, addresses, and telephone numbers should be included. You might want to append notes on investment strategies and an explanation of the more complicated aspects of your finances, such as benefits expected from tax shelters. The idea is to provide a road map of your financial affairs that reduces the time you spend rummaging through your records, and will serve as a guide to survivors, should you (God forbid!) die.

Obviously, compiling this document should be a family affair. Your computer makes the task much easier: data is easy to rearrange, and you can update your records at any time without filling out an entire new form. If you have a database or filing program, you may want to adapt it to this purpose. (Arrays, Inc./Continental Software's *Home Cataloger* provides an excellent tool for this kind of inventory-taking.) You can also use any word processing program. Be sure to print a copy of your inventory when it is completed. The person who needs to use it may not be familiar with your computer or may not think to look through your floppy disks. Besides, magnetically recorded data are notoriously prone to freak accidents; a magnetized paper clip can wipe out a disk. It is important that all family members and someone outside the household know where your inventory is kept. It may be the key to finding the way through the rest of your records.

By way of example, meet Tom and Susan Lassiter, a fairly typical (and hypothetical) young urban couple who live in Hagerstown, Md. Susan is 33 and earns \$33,500 as assistant managing editor of the local newspaper. Tom is 31 and earns \$27,300 as a high school principal. They have no children and own their home. Figure 1 shows their financial inventory, as figured with a word processing program. (This is only an example. Adapt your inventory to your own situation.)

Susan & Tom Lassiter
505 Lakeshore Dr.
Hagerstown, Md. 55555

Thomas L. Lassiter	Birth Date: 2/3/53
SS#: 444-55-6666	
Employer: Hagerstown City Schools	
Contact: Willard Jones	Phone: 555-3241

Susan L. Lassiter	Birth Date: 3/5/51
SS#: 555-99-1234	
Employer: Hagerstown Clarion Bugle	
Contact: Fred Williamson	Phone: 541-1234

BANK ACCOUNTS

Checking (Tom)

State Bank

Acct. # 555333123

Statements in file cabinet

Checking (Susan)

State Bank

Acct. # 555123123

Statements in file cabinet

Money Market (Joint)

State Bank

Acct. # 123123123

Statements in file cabinet

IRA (Joint)

State Bank

Acct. # 321457958

Records in file cabinet

SECURITIES

XYZ Mutual Fund

125 shares

Purchased: 4/5/82

Purchase Price: \$12,500

Broker: Jerry Thomson

Phone: 555-8712

Merrill Lynch

Certificates in safe deposit box

CREDIT CARDS

VISA (Joint)

Acct. #: 5555-111-123-123

MasterCard (Joint)

Acct. #: 7777-0000-3333-1234

Statements in file cabinet

MORTGAGE

Home Savings & Loan

Loan #: 90876-9

Loan Officer: Evelyn Smith

Phone: 555-9876

Loan agreement in file cabinet

VOLVO LOAN

Clarion Bugle Credit Union

Acct. #89865

Contact: Bruce Kapowsky

Phone: 555-7892

(at work)

Contract in file cabinet

SAFE DEPOSIT BOX

State Bank, Cedar St. Branch

Box #: 534

Contents: Birth certificates, passports, deed to house, title to car, stock certificates, etc.

Key in top drawer of desk in study

REAL ESTATE

505 Lakeshore Drive
Deed in safe deposit box

Purchase price: \$75,000

INSURANCE

Auto Liability & Collision

Fidelity Mutual

Agent: Kim McCarthy

Acme Insurance Agency

405 Saunders St.

Hagerstown, Md. 55555

Policy in file cabinet

Health

Susan

Blue Cross & Blue Shield

Contact: Bruce Kapowsky

(at work)

Benefits book in file cabinet

Tom

State Employees Insurance

Contact: Sharon Leveritt

(Schools central office)

Benefits book in file cabinet

Life

Tom

At work

Contact: Sharon Leveritt

Beneficiary: Susan

Susan

At work

Contact: Bruce Kapowsky

Beneficiary: Tom

Homeowners

Mutual of East Overshoe

Amount: \$110,000

Agent: Emily Smith

Smith Insurance Agency

678 Overton Ave.

Hagerstown, Md. 55555

Policy in safe deposit box

Policy #: 8763402

Phone: 555-4325

Group #: 555-99-1234-1

Phone: 555-7892

Acct. #: 8760943

Phone: 555-1111

Amount: \$50,000

Phone: 555-1111

Amount: \$75,000

Phone: 555-7892

Policy #: 56903-2

Phone: 555-0098

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Figure 1-1: A financial inventory is a road map to your financial affairs. It helps you to organize your financial life and serves as a guide to survivors if you should die.



2 HOW MUCH ARE YOU WORTH?

In mid-1984, CIA Director William J. Casey filed an official federal statement to the effect that his assets added up to, oh, maybe as much as \$14 million, give or take a few million. He listed holdings in more than seventy enterprises ranging from a health club to airlines. The value of each asset was listed in a broad range (more than \$250,000, \$150,000-\$250,000, and so forth). He listed investments of more than \$250,000 in each of eight businesses.

What do you know about William Casey's financial condition? Hardly anything, except that he apparently suffers an embarrassment of riches. (He had begrudgingly put his holdings into a blind trust, after criticism that his extensive business interests held the potential for conflicts of interest and that he might benefit from insider information through the agency's intelligence gathering.) Casey's statement does not list liabilities, and it gives only a fuzzy suggestion of the value of his assets. The Associated Press reported that it had arrived at the \$14 million figure by toting up "the top value of all the listings." (The AP didn't explain how it arrived at a top value for the over-\$250,000 category.) For all you can tell from Casey's financial disclosure, he could be on the verge of bankruptcy, but that's hardly likely.

The most important measurement in accounting is the equation on the bottom line of the balance sheet: $\text{Net Worth} = \text{Assets} - \text{Liabilities}$. You can bet Casey, or at least his accountants, knows more about how the equation comes out than his statement reveals. There's little truth to Bunker Hunt's boast that you're not worth much if you can figure out how much you're worth. Nelson Rockefeller, then vice president designate, was pretty specific when he filed his financial statement in 1974: Assets \$64,154,238, liabilities \$1,573,013, net worth \$62,581,225. (See Figure 2-1.)

The CIA, and Casey's accountants, probably have more information than is shown in Casey's disclosure. You should, too.

Your Balance Sheet

If you're still in the shoe box mode of household management, you may not have any better idea of your own overall financial health than you have about Casey's from his sketchy financial disclosure. You may not know how much you owe on your mortgage, the cash value of your life insurance policies, or the current value of the coin collection in the closet. (And, hey Mabel, how much do you reckon the Chevy's worth?)

All debits and credits flow eventually to the bottom line of the balance sheet. For good or ill, your personal balance sheet sums up the effect of every

purchase you have made, every investment you have made, and every dollar of income you have received. In short, it gives you a concise summary of your financial condition without going into detail about how you got there. At some point, you have probably filled out a net worth statement to obtain a loan. (An actual bank net worth form is reproduced in Figure 2-2.) Well, you should be more interested in your financial well-being than your bank is. A personal balance sheet is the logical place to begin planning for the future.

You may be pleasantly surprised when you add up your net worth. The average household net worth in the United States was about \$108,000 in 1981, up from \$18,000 in 1962. The typical household net worth increased by an average of 8.3% per year during that period. Even taking inflation into account, average net worth more than doubled during those two decades.

PERSONAL BALANCE SHEET FOR
NELSON ROCKEFELLER

PAGE 1		PAGE 2	
ASSETS	AUG '74	LIABILITIES	AUG '74
-----		-----	
CASH		CREDIT CARDS	
-----		-----	
CASH ACCOUNT #1	395		
	-----	TOTAL CREDIT CARDS	0
TOTAL CASH	395		
CHECKBOOKS		OTHER LIABILITIES	
-----		-----	
CHECKBOOK #1	0	NOTES PAYABLE	1568
	-----	MISC. ACCOUNTS PAYABLE	6
TOTAL CHECKBOOKS	0		-----
		TOTAL OTHER LIABILITIES	1574
OTHER ASSETS			
-----		TOTAL LIABILITIES	1574
			=====
CASH ADVANCES	248	NET WORTH	62579
NOTES RECEIVABLE	1518		=====
ACCOUNTS RECEIVABLE	713		
N.Y. RETIREMENT FUND	22		
SECURITIES	12794		
PARTNERSHIP INTERESTS	157		
ART	33561		
REAL ESTATE	11252		
FURNISHINGS	1191		
CARS BOATS AIRPLANES	1768		
JEWELRY	521		
COINS	13		

TOTAL OTHER ASSETS	63758		

TOTAL ASSETS	64153		
	=====		

Figure 2-1—Nelson Rockefeller's 1974 personal balance sheet is too rich for *The Home Accountant's* blood. It can't count as high as Rockefeller's accountants could, so numbers here are given in thousands. His actual statement was quite precise: assets \$64,154,238, liabilities \$1,573,013, net worth \$62,581,225.

Rapid appreciation of real estate accounted for a large part of these increases. As a result, tangible assets, such as homes and automobiles, accounted for 36% of the typical family's assets in 1981, compared with 28% in 1962. Financial assets accounted for the remainder in both cases.

NCNB North Carolina National Bank		Financial Statement		Date Of Statement
Name Of Applicant Or Borrower		Name Of Co-Borrower		
Address		Address		
City	State	Zip Code	City	State
City	State	Zip Code	City	State
Occupation Or Business	Social Security Number	Occupation Or Business	Social Security Number	
<p>Falsification of information used to obtain credit is a violation of federal law subject to criminal penalties. Note: If there is or will be a Co-Borrower <u>who is the joint owner</u> of assets listed hereon, a joint Financial Statement <u>may</u> be furnished at the option of the Borrowers; if such Co-Borrower is not the joint owner of assets shown hereon, separate Financial Statements must be furnished by each such Borrower and Co-Borrower.</p>				
Assets (Fill in all blanks, showing "None" where appropriate)		Liabilities (Fill in all blanks, showing "None" where appropriate)		
Cash \$ _____ On Hand _____ In Checking (Acct. No. _____) NCNB Savings (Acct. No. _____) Other Depositories _____ Total Cash _____ Notes Receivable _____ Unsecured Due within 12 months _____ Due beyond 12 months _____ Secured Due within 12 months _____ Due beyond 12 months _____ Total Notes Receivable _____ Accounts Receivable _____ _____ _____ Total Accounts Receivable _____ Investments (schedule 1 on back of page) _____ U. S. Government Securities _____ Marketable Securities _____ Other Investments _____ Total Investments _____ Real Estate (schedule 2 on back of page) _____ Cash Value Of Life Insurance (do not list face value) _____ Other Assets (fair market value) _____ Household Furnishings _____ Auto (describe) _____ _____ Other (describe) _____ _____ Total Other Assets _____ Total Assets _____		Notes Payable (schedule 3-A) \$ _____ To NCNB _____ To Other Banks _____ Total Notes Payable _____ Accounts Payable (schedule 3-B) _____ Installment Accounts _____ Others _____ Total Accounts Payable _____ Taxes Due _____ Income _____ Real Estate _____ Other _____ Total Taxes Due _____ Mortgages Due (schedule 2 on back of page) _____ Due within 12 months _____ Due beyond 12 months _____ Total Mortgages Due _____ Other Liabilities (describe) _____ _____ _____ _____ Loans Against Life Insurance _____ _____ _____ Total Other Liabilities _____ Total Liabilities _____ Net Worth \$ _____ Enter Total Assets _____ Less Total Liabilities _____ Computation: Net Worth _____ Total Liabilities & Net Worth _____		
<p>For the purpose of obtaining credit, direct or indirect, and any other accommodations or benefits from the North Carolina National Bank, from time to time, I/we submit above and on the reverse side hereof the statement of my/our financial condition as of date indicated above. In consideration of the premises, I/we agree to notify the North Carolina National Bank of any changes affecting my/our financial responsibility and will at any time upon request furnish the North Carolina National Bank a then current statement of my/our financial condition, said statement to be in such form as required by said bank.</p> <p>I/We certify as a basis for credit that, to the best of My/Our knowledge and belief, the information furnished and all representations made herein constitute the true and correct statement of My/Our financial condition; that I/We have no assets or liabilities other than as shown on this statement; that all My/Our assets are free of lien assignment except as shown herein and that there are no judgments outstanding or suits pending against Me/Us.</p>				
X _____ Witness		X _____ Signature (Sign Here And On Back Page)		
X _____ Witness		X _____ Signature (Sign Here And On Back Page)		
For Bank: _____ Use Only: _____		<input type="checkbox"/> Received by mail <input type="checkbox"/> Delivered in person		
Statement Received By		Date Received		

Figure 2-2—When you ask for a loan, a bank wants to know what it's getting into. This is an actual bank financial statement. What is it? Simply a personal balance sheet. You should care more about your own financial condition than your loan officer does.

A typical household also goes through its own life cycle as the husband and wife get older, children grow up, and the family's needs change. People from their twenties through their forties tend to accumulate personal assets, as they trade up to larger houses and buy more expensive cars. Retirement remains distant, and building up financial assets tends to take second place. By the time a couple reaches their fifties, however, their purchases tend to slow down; they concentrate on investments, build financial security, and plan for retirement.

The important point, however, is not how your balance sheet compares to the norm but what it tells you about whether you are meeting your own financial objectives—increasing your net worth by 15% per year, for example. If you have not yet set clear objectives, the balance sheet helps you determine what they should be. You'll also want to examine your cash flow, tax situation, and budget (covered in the next chapters) before you make investment decisions.

There's no need to keep up with your net worth on a daily or monthly basis. But you should review your progress annually or semi-annually. Year-end and tax time are the logical occasions. You'll also probably need to reevaluate whenever applying for credit or making some major financial decision, such as buying a house or car, taking out a second mortgage, or setting up an investment plan for retirement. Major life changes are another time to reassess—a marriage, the birth of a child, an inheritance, or a divorce, for example. Such events can radically alter your financial status and objectives.

Over time, changes in your personal balance sheet will tell you a great deal about yourself. Have you put your money into personal property, such as a house, automobiles, and furniture, or have you invested it in savings, securities, and income property? Have you set aside an adequate emergency fund, in cash or quickly convertible investments? Are you getting over your head in debt? Have you provided adequately for your family in case of unexpected death? Is your insurance coverage adequate? Are your investments keeping ahead of inflation, or even keeping up? Are your investments diversified, or are all your eggs in one basket, exposing you to serious risk at an unexpected turn of events? Can you afford a larger house? A new car? A place at the beach?

(Sketchy as it is, William Casey's financial report clearly shows that he has placed his money in a widely diversified portfolio of income-producing business investments. Nelson Rockefeller, on the other hand, invested heavily in art. Rockefeller's collection undoubtedly appreciated quite nicely, without producing income or income tax liability, except when pieces were sold. Investing in art on Rockefeller's scale is a different proposition from what most of us would, or could, undertake. For most people, financial advisers count art as personal property rather than an investment. Art is a risky investment for amateurs. What you have to *pay* for a work may rise dramatically. Getting the money back out of your investment is another matter entirely. Most of us lack the means to sell valuable art ourselves, and galleries charge very high commissions.)

The balance sheet may reassure you that you're on target. On the other hand, if you don't like what you see, you'll be able to determine the cure. Either way, the balance sheet sets the stage for long-range planning. You can build net worth by increasing your savings, reinvesting income from investments and by buying property that will appreciate. You'll also be able to tell whether you can afford to spend some of your hard-earned capital on assets that will produce no income and will depreciate.

To complete your balance sheet, you will need *The Home Accountant* and at least one initialized data disk. (You may also want to use a spreadsheet program.) It will also be helpful to have on hand the records you located for the last chapter, including the payment schedule on your mortgage and any other loans and the cash value tables for any life insurance policies. You will also need your most recent bank and credit card statements, your checkbooks, and unpaid bills. A daily newspaper stock page will give you the current value of your stocks, and the Sunday real estate section should help you make at least a ballpark estimate of how much your house is worth. You may find that you need additional information to make accurate assessments of some of your assets and liabilities. Don't worry about that at the moment. Make your best conservative estimate. It will be easy to update your balance sheet when more information is available.

By way of example, we'll revisit Tom and Susan Lassiter. They have always operated on a cash basis, spending or saving what was left after the bills were paid without much thought. Now they've decided it's time to look ahead.

Calculating Your Net Worth

You are now ready to set up a balance sheet with *The Home Accountant*. The critical equation, you will recall is: $\text{Net Worth} = \text{Assets} - \text{Liabilities}$. To determine your net worth, you simply add up the value of everything you own, then subtract what you owe. The difference is your net worth.

You should already have configured your program disk for your computer system, following the instructions in the manual, and initialized several data disks. Fill out the System Information screen and proceed to the Budget Module. This is where you will eventually set up your budget, but we're not ready to do that yet. For now, just fill out the beginning amount in each category and enter zeroes for each month. (Type **0** for the first month, then complete the year by entering **SAME** in the second. *The Home Accountant Expanded* gives you the option of not entering budget amounts as you set up categories.) *The Home Accountant* requires you to begin your accounting system by listing your checkbooks.

Assets

Checkbooks: Start with your most recent monthly statement, then update it from your checkbook. *The Home Accountant* will accommodate up to five checkbooks. You should use the Checkbook designation for any demand

accounts in which you make frequent transactions. These should include bank money market accounts, savings accounts, NOW accounts, and so forth.

The Lassiters have three such accounts: two personal checking accounts and a joint money market account at the bank. They begin by entering Tom's checkbook data (Figure 2-3). His balance is \$427.56 (Figure 2-4). *The Home Accountant* requires you to set up a cash account for each checking account but does not require you to use them. You can use these later to keep track of cash purchases if you wish. On your balance sheet, you can record the cash you have around the house, if there's a significant amount in the sugar jar.

```

** HOME ACCOUNTANT **
BUDGET
SUSAN & TOM LASSITER JAN 1984
CHECKBOOK# 1

A NAME      TOM LASSITER
B ADDRESS   505 LAKESHORE DR.
C CITY      HAGERSTOWN
D STATE     MD
E ZIP CODE  55555
F BANK      STATE BANK
G ACCOUNT#  555333123

LETTER TO EDIT (A-G)
X(CANCEL)   P(PRINT)   R(RECORD)
ENTER SELECTION

```

Figure 2-3—Starting a personal balance sheet on *The Home Accountant*. Tom Lassiter's checking account.

```

** HOME ACCOUNTANT **
ADD CHECKBOOK BUDGET CATEGORIES
CATEGORY# 1
TYPE      CHECKBOOK
B TITLE   CHECKBOOK #1
          BEG  ACTUAL  DIFFERENCE
          BUDGET C
D JAN     0      427.56      428
E FEB     0      0.00       0
F MAR     0      0.00       0
G APR     0      0.00       0
H MAY     0      0.00       0
I JUN     0      0.00       0
J JUL     0      0.00       0
K AUG     0      0.00       0
L SEP     0      0.00       0
M OCT     0      0.00       0
N NOV     0      0.00       0
O DEC     0      0.00       0

LETTER TO EDIT (A-O)
X(CANCEL)   P(PRINT)   R(RECORD)
ENTER SELECTION PN

```

Figure 2-4—Filling in the current balance in Tom Lassiter's checking account. For now, budget and actual ending balances are left at 0. Other asset and liability accounts will be filled out similarly.

The Lassiters have only pocket money and decide to skip it. They repeat the procedure for Susan's account (balance \$316.00) and their money market account (\$14,000.00).

Real Estate: If you own your home, it will probably be your largest asset. It should be included on your balance sheet at its current market value. The most accurate way to determine that figure would be to have the house appraised by a professional real estate agent. That's probably not necessary. Check listings of comparable homes in your local newspaper or a real estate agent's multiple listings. Be sure to take into account variations in size. Suppose a 2,000-square foot house in your neighborhood is on the market for \$100,000, or \$50 a square foot. If your house is 1,800 square feet, it might be worth \$90,000. List this in an asset account. The Lassiters decide their house is worth \$102,000. (If you want, *The Home Accountant* will quickly calculate your house's appreciation each month. For example, the value of your house would increase 0.5% per month if it is appreciating at 6% per year. Consult the manual.)

Automobiles, boats, airplanes, etc.: These also should be included at market value. Newspaper advertisements are the most easily available source of information. Most banks and other lenders have books for appraising cars. *The Kelley Blue Book* is a standard reference. Another is put out by the National Automobile Dealers Association. The Lassiters decide their 1982 Volvo is worth \$9,500 and their 1978 Volkswagen Dasher is worth \$1,000. They set up separate asset accounts for each car.

Investments: Even if you have not been managing your money assiduously, you probably have set aside some money in investments. Later, it will be important to distinguish between liquid assets and fixed assets, and between long- and short-term investments. For the moment, however, simply set up asset accounts for each of your investments. Like many last-minute tax filers, the Lassiters both made their first \$2,000 contributions to Individual Retirement Accounts on April 16. (April 15 fell on a Sunday in 1984.) Their quarterly statements show each has received a heady \$8 in interest. They also have a mutual stock fund worth \$13,234.

Household Property: Many advisers recommend that you simply list 5% of the value of your house as household furnishings. You may also itemize your possessions. (Don't forget your computer.) However, you should be very conservative in estimating their value. Furnishings and clothing should be assessed at their market value—that is, the price they would bring if sold. Your insurance company will not pay more. Used clothing and furniture is worth far less than you originally paid. Some advisers recommend making a conservative estimate, then slashing it by 50% or even 75%. The Lassiters may have been optimistic in setting the value of their household goods at \$15,000.

The Lassiters have now listed all of their assets. (We've kept the example simple.) Many people have many other kinds of assets, some of which may not come immediately to mind. You may set up asset accounts for:

- **Securities.** Stock and bond quotes in your daily newspaper will give you an up-to-date listing of the value of your holdings.
- **U.S. Savings Bonds.** List at their current redemption value, not their face value. (Savings bonds continue to draw interest after maturity.) Your bank can tell you the current value of your bonds.
- **Annuities and Pension Funds.** List the *current* value—the amount you could withdraw on request. Your insurance agent, employer or bank can provide the necessary information. If your pension plan lists only how much you can expect to receive on retirement, leave it off your balance sheet.
- **Life Insurance.** List only the *cash value*, the amount you could borrow on request or would receive if you cancelled the policy. This information is available from your policy or your insurance agent.
- **Partnership or Business Interest.** List the market value of your interest in any business or partnership. This may be difficult to determine accurately. Be realistic—and conservative.
- **Any Money Owed to You.** List the principal of any loans and interest currently due, provided you are reasonably confident the loan will be repaid. If you think there's only a 60% chance Uncle Ed will repay the \$400 you lent him last Christmas, list the loan as worth \$240. (Knowing Uncle Ed, even 60% is optimistic.) Obviously this figure, like many others on your balance sheet, will be somewhat speculative.
- **Collectibles.** Include diamonds, jewelry, rare coins, stamp collections, antique furniture, antique dolls, and art. These probably are not readily convertible to cash, and most advisers consider them personal property rather than investments. Nevertheless, collectibles may appreciate in value. You may want a professional appraisal. Specialized magazines and books may also be of help in determining the value of some items. Again, be conservative.

The Lassiters' assets add up to \$159,494—not in a league with William Casey and Nelson Rockefeller, but not bad for a newspaper editor and a school principal just beginning to think about managing their money. Of course, they don't own this property free and clear. To complete the equation at the bottom of the balance sheet, they must also calculate their liabilities—the total amount they owe.

Liabilities

Like most people, the Lassiters have considerably fewer liabilities than assets. *The Home Accountant* lets you set up liability accounts for loans and other debts and special credit card accounts that function somewhat like checking accounts. You will be using these more extensively as you set up a budget and begin using your computer to keep track of transactions. For now, simply list current amounts, as you did with assets.

Credit Cards: List current balances, including purchases since your last statement. (Bear in mind that the money would already have been withdrawn

from your checking account if you had paid by check.) The Lassiters owe \$357 on MasterCard and \$468 on VISA.

Mortgage: Just as a house is likely to be a family's most valuable asset, the mortgage is apt to be the largest liability. List the amount remaining on the principal. You can find this amount on the loan reduction schedule you received with your mortgage papers or from your bank or savings and loan. The Lassiters paid \$70,000 for their house four years ago and have remodeled an attic room as a study for Susan. They made a down payment of \$20,000 and borrowed \$50,000 at 14% interest. Now, in the forty-ninth month of the loan, the remaining principal is \$49,419. (In four years, they have paid off less than \$600 of the principal.)

Loans: The Lassiters have only one other outstanding loan, on their Volvo. The balance is \$5,122. (The Dasher is paid for.) You should also include store charge accounts, consumer installment loans, education loans, loans for stocks bought on margin, a mortgage on a second home—all debts. These should be listed in separate liability accounts. Later, *The Home Accountant* will automatically adjust the amount of the liability each time you make a payment.

Outstanding Bills: List any unpaid bills. You probably will not include this category in your budget. Most people will not need to set up categories for accounts payable and accounts receivable. (Remember: Simplify, simplify.) Nevertheless, outstanding bills should be included on your balance sheet, since they represent credit extended for services already rendered. The Lassiters owe \$435.

Your liability statement should also include taxes that have not been covered by payroll deductions or a mortgage escrow account. These might include taxes on capital gains, real estate, or personal property. Income taxes should not be included, however, unless they are past due.

IMPORTANT: *The Home Accountant* will not prepare printed reports until you have entered at least one transaction. To bypass this requirement, simply choose Start New Month from the Main Menu and enter a checkbook transaction for 0.00. You can now enter the Print Reports module of *The Home Accountant* and print your balance sheet.

The Lassiters' balance sheet is shown in Figure 2-5. They have \$159,494 in assets, \$55,801 in liabilities, and a net worth of \$103,693 (Net Worth, \$103,693 = Assets, \$159,494 - Liabilities, \$55,801). Without any financial planning they have accumulated a net worth of more than \$100,000. That sounds pretty impressive, but their balance sheet—and yours—requires a harder look before they run down to the bank to borrow against their assets.

PERSONAL BALANCE SHEET FOR
SUSAN & TOM LASSITER

PAGE 1

PAGE 2

ASSETS	JAN '84	LIABILITIES	JAN '84
-----		-----	
CASH		CREDIT CARDS	
-----		-----	
CASH ACCOUNT #1	0	M/C	357
CASH ACCOUNT #2	0	VISA	468
CASH ACCOUNT #3	0		-----
TOTAL CASH	0	TOTAL CREDIT CARDS	825
CHECKBOOKS		OTHER LIABILITIES	
-----		-----	
CHECKBOOK #1	428	MORTGAGE ON LAKESHORE	49419
CHECKBOOK #2	316	VOLVO LOAN	5122
CHECKBOOK #3	14000	BILLS DUE	435
TOTAL CHECKBOOKS	14744	TOTAL OTHER LIABILITIES	54976
OTHER ASSETS		TOTAL LIABILITIES	55801
-----		-----	
HOUSE ON LAKESHORE	102000	NET WORTH	=====
VOLVO	9500		103693
VW	1000		=====
IRA (TOM'S)	2008		
IRA (SUSAN'S)	2008		
XYZ MUTUAL FUND	13234		
HOUSEHOLD PROPERTY	15000		
TOTAL OTHER ASSETS	144750		
TOTAL ASSETS	159494		
	=====		

Figure 2-5—The Lassiters' balance sheet shows a net worth of \$103,693—not in Rockefeller's range, but not bad for a young couple whose income is growing. They now have a benchmark against which to measure their financial progress.

Analyzing Your Balance Sheet

How are the Lassiters doing financially? (More importantly, how are *you* doing?) We haven't even glanced at income yet. The balance sheet is summary of the results of all of your financial decisions to date. What does it mean?

For businesses, Robert Morris Associates puts out *Annual Statement Studies*, analyzing the financial statements of companies representing hundreds of industries. It is chock full of all kinds of ratios for each industry: assets to liabilities, revenues to assets, profits to revenues, administrative expense to revenues, and so on. MBAs go to school for years to learn what it all means, and commercial lenders compare their clients' ratios to industry standards. (I am indebted here to Dick Levin's breezy account of the vicissitudes of getting Robert Morris in *Buy Low, Sell High, Collect Early & Pay Late*—pretty well

sums it up, doesn't it?—published by Prentice-Hall, 1983.) Businesses are fairly single-minded in the pursuit of profit, and one shoebox manufacturer is likely to go about it more or less the same way as the next. Business *is* competitive. And, if the shoebox company next door has better Robert Morris ratios than yours, you'll want to know why.

Personal finances are not so competitive. You have to weigh current desires and needs against long-term goals, and that's a personal matter. If you blow three grand to go scuba diving in Cozumel at the height of the February slush, one hopes it's because you enjoy the hell out of it, and not to outdo the neighbors' trip to Disney World last year. (Well, if your financial goal *is* to outdo the neighbors, so be it. As H.L. Mencken once said, wealth is at least one hundred dollars more a year than the income of one's wife's sister's husband. You still have to figure out how to come up with the three grand.)

Anyway, your balance sheet does allow you to begin measuring how well you're keeping up with the Joneses and, more importantly, whether you're headed in the direction you want to go. The AP describes William Casey as a self-made millionaire, and you can tell from his financial statement that his business is business. He is heavily invested in properties intended to produce income and long-term gains. His holdings are well-diversified (eggs and baskets, you know). We know nothing of his debt. Rockefeller, on the other hand, inherited his money, and his strategy appears to have been to conserve wealth. All that art was appreciating without generating income tax liability. On his scale of operation, his borrowings hardly amounted to loose change. His asset-to-liability ratio, if you want to look at it that way, was about 41 to 1.

The Lassiters' finances are more at a level where we goats can get at them. Their net worth of \$103,693 looks fairly substantial, although it's not up to the 1981 national average of \$108,000. (If the national figure continues to grow at 8.3% per year, as it did in the 1970s, it will have reached about \$137,000 by 1984; inflation is a cruel mistress.) And, while the Lassiters have not gone overboard on consumer loans, their asset-to-liability ratio (assets divided by liabilities) is only 2.9. The national average is between 5 and 6, according to the Federal Reserve Board, but that figure includes renters as well as mortgage holders.

The cash in the Lassiters' two regular checking accounts (Checkbooks 1 and 2) is insufficient to cover their credit card balances and outstanding bills. This may not be a problem, since they deposit their paychecks in the bank money market account and transfer it to checking only as needed. But they'll want to take a closer look at their cash flow (next chapter) to see whether they're staying ahead of the game.

A More Detailed Look at Net Worth

The worksheet in Figure 2-6 gives a more detailed breakdown of how the Lassiters have allocated their resources. (There is no simple way to produce this worksheet on *The Home Accountant*. You can use a spreadsheet if you have one, but pencil, paper, and a pocket calculator are perfectly adequate for the task.) A quick look at the right column shows that 70% of the Lassiters' net

PERSONAL BALANCE SHEET FOR SUSAN & TOM LASSITER		
		Percent of Net Worth
LIQUID ASSETS		
Tom's Checkbook	428	
Susan's Checkbook	316	
Money Market Account	14000	
Total	14744	
SHORT-TERM LIABILITIES		
Bills Due	435	
MasterCard	357	
VISA	468	
Total	1260	
NET LIQUID ASSETS	13484	13%
Ratio	11.7	
MARKETABLE/INVESTMENT ASSETS		
IRA (TOM'S)	2008	
IRA (SUSAN'S)	2008	
XYZ Mutual Fund	13234	
Total	17250	
LIABILITIES		
None	0	
INVESTMENT EQUITY	17250	17%
PERSONAL/FIXED ASSETS		
House on Lakeshore	102000	
Volvo	9500	
VW	1000	
Household Property	15000	
Total	127500	
LONG-TERM LIABILITIES		
Mortgage	49419	
Volvo Loan	5122	
Total	54541	
EQUITY IN PERSONAL ASSETS	72959	70%
(House on Lakeshore	52581)	
Percent	52%	
NET WORTH	103693	100%

Figure 2-6—A breakdown of the Lassiters' assets and liabilities tells considerably more about their financial condition than Figure 2-5. Like most younger couples, the Lassiters' assets consist largely of personal property. As they grow older, they will need to concentrate more on investments. In this balance sheet, all of the principal due on their mortgage and Volvo loan are included under long-term liabilities, where they are matched against their personal assets.

worth consists of personal property, items they use in their daily lives. This is not surprising, since they're relatively young and are still approaching their peak earning years. Seventeen percent of their net worth is devoted to long-term investments, and 13% is liquid, available in case of emergency or an outstanding investment opportunity. Let's look at the work sheet more closely as you fill out your own.

Liquid Assets and Short-Term Liabilities

Liquid assets are cash and assets that could be quickly converted to cash. They include checking accounts, savings accounts, short-term certificates of deposit, bank money market funds, Treasury bills, and the cash value of life insurance policies.

Short-term liabilities are the opposite of liquid assets—money you already owe and existing debts you will have to pay within the year. (Include only principal on debts. Interest is an expense rather than a liability.) This category includes unpaid bills, credit card balances, consumer credit, installment loans, personal loans, borrowings on life insurance, and so forth. Taxes also should be included if they are currently due.

To be excruciatingly proper about it, you really should include payments on *principal* (not interest) due within twelve months on long-term loans. You can calculate these figures from your loan schedules. The bank's personal financial statement form in Figure 2-2 requires this calculation. You may not need to go to the trouble, however, unless you are concerned that you may be overborrowing. (If you include any long-term debt here, be sure to deduct the same amount from the principal owed on your long-term debts.)

Figure 2-6 is the Lassiters' balance sheet with amounts owed on long-term debt excluded from short-term liabilities. Figure 2-7 is the same balance sheet, with principal due within twelve months included among short-term liabilities. As you can see, the calculation has no effect on total net worth, and the effect on the distribution of their resources is negligible. The calculation does have a dramatic effect on coverage of short-term debt, however. The ratio of liquid assets to short-term liabilities drops from 11.7 to 4.1.

For high rollers, liquid assets should be at least 1.5 to 2 times short-term liabilities. If it appears that including this year's principal payments on long-term debt will put you anywhere near that range, you might want to make the calculation. If short-term liabilities exceed liquid assets, you are definitely too far in debt. Getting out should become your No. 1 financial priority.

For people like the Lassiters, who devote most of their assets to personal property, the more important consideration is whether liquid assets provide a sufficient cushion against unexpected loss of income. This is likely to require a liquid assets to short-term debt ratio considerably higher than 2:1. As a rule of thumb, your liquid assets should be enough to see you through three to six months without income. To make this calculation, you should

deduct your unpaid bills, since credit card bills and last month's telephone bill have an immediate claim on your checking account. However, it is not necessary to include the portion of your long-term debts due within that

PERSONAL BALANCE SHEET FOR SUSAN & TOM LASSITER

		Percent of Net Worth	
LIQUID ASSETS			
Tom's Checkbook	428		
Susan's Checkbook	316		
Money Market Account	14000		
Total	14744		
SHORT-TERM LIABILITIES			
Bills Due	435		
MasterCard	357		
VISA	468		
Mortgage (12 months)	186		
Volvo Loan (12 months)	2171		
Total	3617		
NET LIQUID ASSETS		11127	11%
Ratio	4.1		
MARKETABLE/INVESTMENT ASSETS			
IRA (TOM'S)	2008		
IRA (SUSAN'S)	2008		
XYZ Mutual Fund	13234		
Total	17250		
LIABILITIES			
None	0		
INVESTMENT EQUITY		17250	17%
PERSONAL/FIXED ASSETS			
House on Lakeshore	102000		
Volvo	9500		
VW	1000		
Household Property	15000		
Total	127500		
LONG-TERM LIABILITIES			
Mortgage	49233		
Volvo Loan	2951		
Total	52184		
EQUITY IN PERSONAL ASSETS		75316	73%
(House on Lakeshore	52581)		
Percent	52%		
NET WORTH		103693	100%

Figure 2-7—Shifting principal due within twelve months on the Lassiters' mortgage and car loan to short-term liabilities has little effect on their balance sheet as a whole. However, it does substantially reduce the ratio of liquid assets to short-term liabilities. The rule of thumb is that liquid assets should equal 1.5 to 2 times short-term liabilities. For most people of relatively modest means, however, the need for a cushion against unexpected setbacks will require a higher ratio. The percentages in the right column do not add up to 100 because of rounding.

period. If you're paying \$500 a month for housing, you'll have to come up with the same \$3,000 in six months whether you're renting or buying.

Whether a cushion of three months is enough, or a cushion of six months is too little, depends on your personal situation and preferences. You may feel secure at the lower end of the range, if you and your spouse have secure jobs, unemployment and disability insurance, health coverage, life insurance and no dependents. You may need a larger nest egg, if your job situation is unstable, if you're on the verge of divorce, if you're planning a major expenditure or investment, or if you're single, have dependents, or are nearing retirement. If your liquid assets total less than \$10,000, there's little point in looking beyond safe, relatively high-yield savings instruments, such as bank money market accounts or certificates of deposit.

We'll discuss the relationship between debt and income in more detail later, but, as a general rule, paying off consumer and installment debts should consume no more than 10% to 15%—certainly no more than 20%—of after-tax income. Including a mortgage, the debt service should not require more than 35% of after-tax income.

Marketable and Investment Assets

This category is for medium- to long-term investments intended to build net worth. Many of these assets, such as stocks and bonds, can be sold at any time. However, such sales should be timed to the market; if you have to sell stocks or bonds in a financial pinch, you're liable to take a drubbing. Such assets are, in effect, only semi-liquid. Other investment assets include income-producing real estate, partnerships, closely held businesses, and retirement funds, including IRAs, Keogh plans and annuities. Also include funds set up to meet long-range goals, such as financing the children's education or buying a new car or home in several years. These may be in the form of otherwise liquid assets, but you don't want to dip into them.

Most people probably have not borrowed money to finance investments. Exceptions might include mortgages on investment properties, securities bought on margin, and loans to partnerships or closely held businesses. Interest on borrowing, of course, is tax deductible (unless the money is borrowed to buy tax-free bonds). As a rule of thumb, to justify borrowing, the after-tax return on an investment should be double the after-tax cost of the debt. In other words, you should be compensated for assuming risk.

Personal Assets and Long-Term Liabilities

Like most young people whose income is climbing, most of the Lassiters' assets are personal property. Their house is their largest asset. Since they are still moving toward their peak earnings, they can afford to take on more liabilities in the expectation that their ability to retire debt will continue to grow. Some advisers are not alarmed even if a young person's net worth is negative. A negative net worth at forty-five, however, is serious trouble.

As they grow older, the Lassiters will probably seek to increase their assets and reduce their liabilities. At this stage in their lives, they may be able to take on debt for investments if they're temperamentally suited for risk-taking. If they have children, they may have to revise their financial plans substantially. Later, they should increase their investments in proportion to their personal property as they prepare for retirement.

The effect on net income of long-term debt is often dramatically different than that of shorter-term loans to pay for cars, day-to-day expenses, refrigerators, and trips to Europe. Cars and refrigerators depreciate rapidly, vacations and clothes are consumed almost immediately, and the interest eats up funds that could have been invested. Real estate and a few other types of assets appreciate, whether they're bought for personal use or as investments. Borrowing to purchase long-term assets can actually provide leverage that increases the return on the investment, and you get a tax break on the interest. Financial advisers consider 20% equity in such property the lower acceptable limit; anything over 50% is high. Largely because of appreciation, the Lassiters' equity in their house is 52% of its value. They might safely borrow against that equity. Of course, the appreciation on the house provides no cash, and they would have to come up with the money to make the payments on the new loan.

In short, long-term debt can be used to purchase assets that create more wealth. On the other hand, you will usually come out ahead by keeping consumer debt to a minimum.

You should keep your balance sheet and the accompanying analysis with your financial records to use as a gauge of your progress. Net worth can be increased by spending less and saving more, upgrading investments for higher returns, spending more time managing your investments, or accelerating debt payments, starting with those carrying the highest interest rates. You should also keep an eye for opportunities to refinance your long-term debts at lower interest.

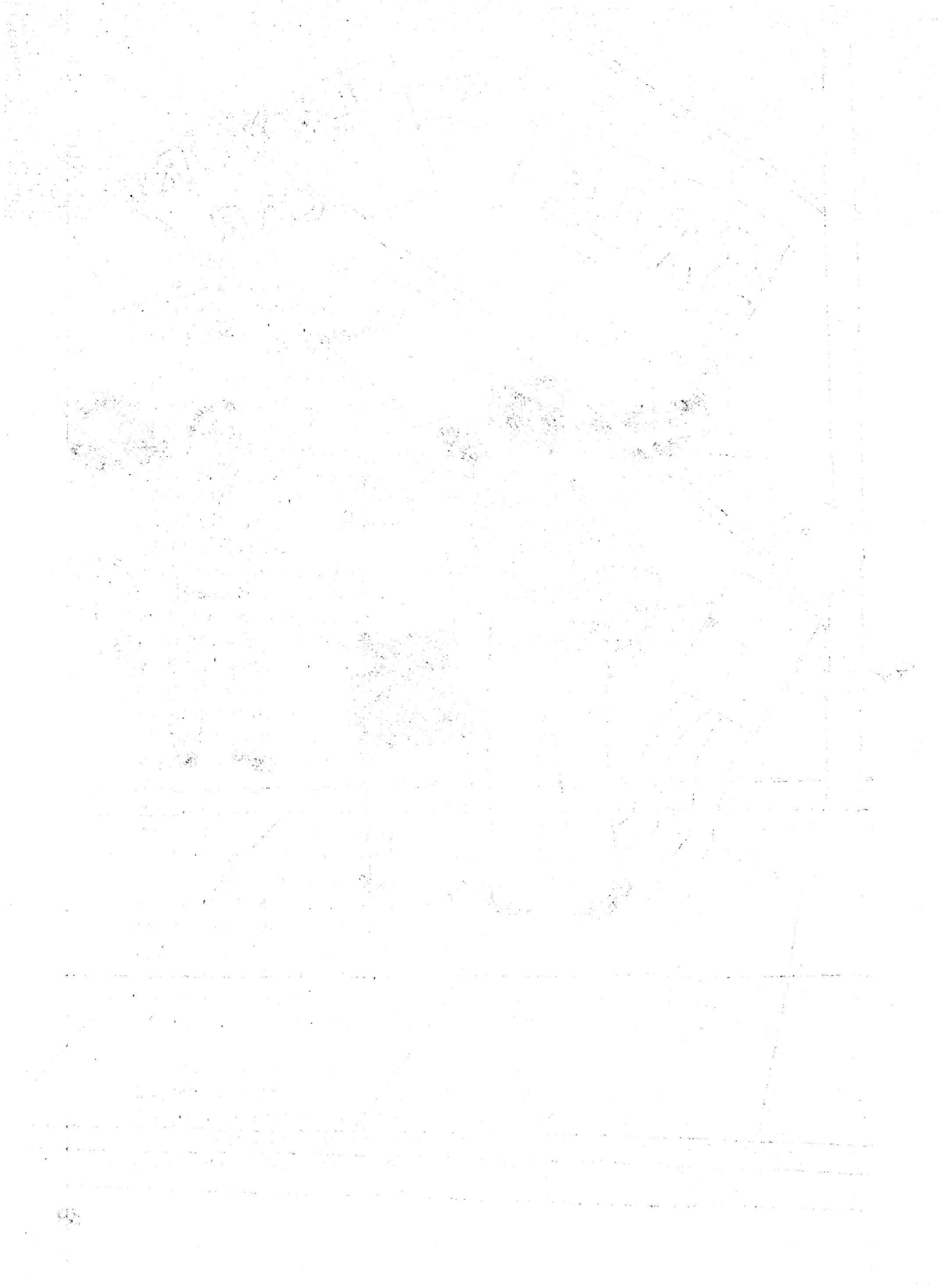
Before adopting financial goals, however, it is important to analyze current income and spending. We'll do that in the next chapter.

Rules of Thumb

- 1) Liquid assets should be at least 1.5 to 2 times short-term debt.
- 2) Liquid assets less short-term debt should equal three to six months of take-home pay.
- 3) Some advisers recommend that liquid assets represent 20% of 50% of total assets.
- 4) If you borrow to finance an investment, the after-tax return should be twice the after-tax cost of borrowing.
- 5) Twenty percent equity in a long-term property that is appreciating, such as real estate, is low. Fifty percent is high and may afford an opportunity to borrow against the asset.

- 6) Long-term loans to finance assets that appreciate can increase your net worth. Loans to purchase consumables should generally be kept to a minimum.







3 BUDGETING: WHERE DOES IT ALL GO?

Your personal balance sheet shows the net effect of your financial life to date. It shows how much you're worth as a result of years of credits and debits. But the balance sheet doesn't tell you how you arrived where you are, and you need to know where your money is going if you want to plan for the future.

The basic tool for financial planning is a budget. How dreary, like going on a diet. No more nights on the town. More Hamburger Helper. Vacations at the in-laws' instead of the Caribbean. Greetings, K mart shoppers....Oh, gloom.

It doesn't have to be like that at all. If you're over your head in debt, budgeting is like dieting when the doctor says you'll have a heart attack before you're forty if you don't. A budget requires self-denial, but it's a matter of survival. (And you probably need more help than you can get from a book.) Most of us, like Susan and Tom Lassiter, aren't in that kind of trouble. We may not know exactly where our money is going, and we may not be saving as much as we might. But we keep our checkbooks in the black, the credit cards are reasonably under control, and we don't borrow or raid the savings account on a regular basis to pay for basic living expenses. So we're not talking about living on bread and water. In fact, it would be useless to try; you'd never stick to the budget.

Not long ago, I met a well-paid executive who had just begun keeping track of his budget on his personal computer. "The good news is I know where the money's going," he said. "The bad news is I'm sick about it." He had discovered he was frittering away money on things that were not particularly important to him at the expense of things that were. Every time you spend money, you're making a decision not to spend it on something else. Just because you don't think of it that way doesn't spare you from the inevitable result of that decision: the money's gone. Not planning for the future and not saving are also decisions. A budget is a tool for keeping track of how you're spending your money. Once you know this, you can set priorities: you pay first for what you need and only then for the things you really want. If you have to make cuts, they'll come at the lowest priority. The choice may not be between rack of lamb by candlelight and Hamburger Helper, but between the lamb and a rib-eye on the grill at home (you can still have the candlelight), with the difference going toward a vacation.

If you look at it that way, budgeting is not a tool for self-denial, but a means of gratification, even though the gratification you choose may be delayed. W.C. Fields once observed that the price of living had gone up a dollar a quart. This isn't a temperance lecture. How you manage your discretionary expenditures is entirely up to you. If the cost of whatever you consider the basics of

life goes up, you're going to have to come up with the cash to cover it. Only if you know how you're spending your money can you make sensible choices between what you really want and what you're willing to forgo.

However, financial advisers are absolutely unanimous on one point: setting aside a certain amount for savings (though surely not in a passbook account) should be your top priority. Be realistic about how much you can save, but sock away your monthly savings just as regularly as you make the mortgage payment, then juggle the rest of your expenditures to fit what's left. Savings should not be a discretionary item. Most advisers agree that 5% of after-tax income is the minimum you should save. Ten percent is better.

Colin Fletcher, author of *The Complete Walker*, says he once caught himself snipping the tags off tea bags in an effort to reduce the weight of his pack. That may be going to an absurd extreme. But not many backpackers carry anvils they can pitch out of their packs, and not many people have the financial equivalent in their budgets.

A penny saved is two pennies earned, maybe more. You're probably familiar with your federal income tax bracket. In 1984, for example, a couple filing jointly pays the federal government thirty-eight cents of every dollar of taxable income over \$45,800. What about state and local income taxes? In most states, that couple's combined state and federal tax bracket would come to somewhere between 45% and 54%. (Only a handful of states have top income tax rates below 7%.) For a single-income family, Social Security taxes would have dropped out by this point. But if there are two incomes, Social Security taxes would tack on another 7% or so, and more than 11% for self-employment income. Depending on your tax bracket, the buying power of a dollar saved is equal to that of two dollars, conceivably three, in increased income. If you live in a city that levies an income tax, you may have to work even harder to take home an extra buck. (And you thought time-and-a-half for overtime was a good deal?)

What does this mean for your savings program? If you're in the habit of having a couple of \$1.50 beers at the corner tavern after work, that's \$3 a day, \$15 a week, \$750 a year. (And if you're in the 50% tax bracket, you would have to earn \$1,500 to pay the bar tab.) If you put your \$750 a year of beer money in tax-exempt bonds for twenty-five years at 10% interest and reinvested your earnings, it would come to nearly \$74,000. If you put the whole \$1,500 in an IRA and dodge the tax man, you get twice that. Looking at it that way, what you've got is a \$150,000 bar tab. If you smoke a pack of cigarettes a day at \$1 a pack, that's \$365 a year. Invested at 10%, it would come to nearly \$36,000 in twenty-five years. (Of course, you might have to plan for a longer retirement if you quit.) Two dollars worth of coffee and junk food in the office canteen every day? Five hundred a year, nearly \$50,000 in twenty-five. I don't mean to pick on vices. W.C. Fields once protested, "We lived for days on nothing but food and water." No fun. Buy your clothes on sale. Eat out a little less often. Buy your Tide in the economy size. Skip a few magazines, or drop a subscrip-

tion to one you seldom read; subscribe to one you buy every month on the newsstand. Keep better expense records so you don't miss out on tax deductions. Whatever. Colin Fletcher may be an extremist, but he's basically right.

It's no use trying to be Spartan about snipping the tags off tea bags, however. W.C. Fields, one suspects, was going to pay the extra dollar a quart whether it was in his budget or not. So the thing to do is to go ahead and include such expenditures. A realistic budget will help you control your cash flow. If you're getting into trouble, it will help you find a way out. If you're in reasonably good shape, as the Lassiters are, it will help you divert those piddling expenses (and maybe some larger ones)—expenditures you make without thinking and don't really care about—into investments that build net worth. A budget you can't or won't live with will wind up in the desk drawer, never to be retrieved. It's not worth the floppy disk it's stored on. Rule One is to be realistic.

Rule Two is to be flexible. The heating bill runs up utilities in the winter; air conditioning causes a summer peak. Insurance premiums, vacations, refrigerator breakdowns, furniture purchases, unexpected car repairs, Christmas, anniversaries, and other erratic expenses create all sorts of dips and bumps in your spending, some predictable and some not. It doesn't hurt anything to move money from one pot to another as long as you still have the amount you've budgeted for savings at the end of the month. (Obviously, a new car or a big vacation will bust your budget for the month if you count it as coming out of operating funds. We'll talk about budgeting for major expenses a little later.) It will probably take at least a year to debug your budget and get it operating smoothly. Don't worry about it. You're headed in the right direction.

Count everybody in (Rule Three). Every management consultant who ever breathed says that if you want people to get on the program, you've got to give them a stake in the action. Autocratic bosses might be able to get away with ignoring this advice (and often do), but at home you can't fire the spouse and kids. Plan together. Brainstorm. Remember that budgeting is an exercise in gratification, not denial, and make sure everybody gets some of the benefits. Family members should have some money to spend as they please. Individuals may want to see if they're getting the most of their mad money, but they shouldn't have to answer to other family members for it. (This is not to suggest abdicating parental responsibility. If you're worried that junior is rotting his teeth because he's spending his entire allowance on Tootsie Pops, that's a health problem, not a budget problem.)

Rule Four: Be conservative. There's no harm done if you end up with a little more money than you figured. Ending up with more bills than cash is not okay. So don't spend that raise before the money starts coming in. (And don't forget that the tax man cometh: that raise isn't as big as it looks.) On the other hand, you should adjust immediately if your income takes a dive. (Again, don't forget the tax man. If your marginal rate for income and Social Security taxes is 50%, the disaster may be only half as bad as it looks at first.) Estimate

expenses liberally. There's no point in fantasizing about cutting your food bill in half. Allow for inflation.

Rule Five: Keep it simple. You're not running General Motors here, and you don't need 478 budget categories. You'll never keep up with them if you try.

Rule Six: There really aren't any rules. A business has to answer to the auditor. You don't, except on your tax form (if you're unlucky). You may ignore the admonition to save regularly at your own peril, but it's up to you. It may be useful to compare your budget to others that various people think are typical. If one of your spending categories is way out of line, you might want to take a hard look at it. But the object is to tailor your budget to your personal situation. Your goals are your own. Nobody else's matters. Nevertheless, it's in your best interest to see what your options really are. That's what budgeting is all about.

Let's give it a try.

Setting Up A Budget

Like balance sheets, income statements (and budgets) always balance. For a business, it comes out like this: Revenues - Expenditures and Taxes = Profit (or Loss). Your revenues are your gross income. Profit is not really the right word for a household budget. Your profit is your savings. The equation always balances, but, if the number on the right is negative, you're operating at a loss and may be headed for trouble.

It follows from the equation that you need an accurate accounting of your income, expenditures, and taxes to get a fix on how you're handling your finances. To cover seasonal variations, one-time expenditures, and other fluctuations, you really need these figures for an entire year. *The Home Accountant* and your computer will be of considerable help, but to be honest, this is going to be a little tedious. Allow several sessions for putting together your baseline data. If a year is too much for you, six months should give you a fairly accurate picture, and you can make adjustments in your budget as you go along. If you absolutely rebel at sorting through last year's tax forms and bank statements, you can use *The Home Accountant* to start keeping track of your income, expenditures, and taxes now. In due time, you will accumulate the information you need to plan your finances effectively. Meanwhile, you'll have a much clearer picture of how you're spending your money and a basis for making short-term decisions.

Here's what you'll need to reconstruct your income and expenditures for the last year (or six months): *The Home Accountant*; a blank, initialized data disk; last year's federal income tax return, including W-2 forms; monthly bank statements and cancelled checks; annual loan statements or payment schedules for those loans; and itemized credit card statements. If you don't have your credit card statements, the card issuer can supply duplicates, or you can make your best guess as to what categories your credit card purchases fell

into. If you use credit cards for only a small percent of your monthly budget, you can put them in a miscellaneous category.

Before you begin dividing your income and expenses into categories, you should understand how *The Home Accountant* works. All transactions, including receiving of income, are entered through checking accounts and credit card accounts. This means that any account in which there is frequent activity should be set up as a checkbook account. Examples include savings accounts, bank money market accounts, and brokerage house accounts that permit checks or transfers from one investment to another.

A checking account is a special asset account; a credit card account is a liability. *The Home Accountant* also allows you to set up regular asset and liability accounts, expense accounts, and income accounts. Your budget always balances, even though it may not always be in the black. Expenditures (or overexpenditures) plus savings equal income. When you enter a check written to, say, the grocery store, it decreases the balance in your checking account. In the same transaction, you assign the check to an expense account (in this case probably "Food"), and that account is increased by the same amount. A deposit assigned to an income account increases both the checking account and the income account. As a liability, a credit card account works in opposite fashion. A purchase increases the balance. A check written to the credit card company decreases the balance in both the credit card and checking accounts. A chart in *The Home Accountant* manual shows how various types of accounts interact.

When you start a new month, *The Home Accountant* closes out the previous month. You can go back and edit transactions, but you cannot enter new ones. If you have any confusion about how accounts interact, you may want to experiment a bit to get a feel for how the program works before you start the second month. (An important point: you can hold open the possibility of entering additional transactions by creating several dummy transactions in each account before starting a new month. On some versions of *The Home Accountant* you can direct the program to add dummy transactions each month through the Utilities module. You can return to these dummy entries through the Search and Edit mode. To search and edit beyond the current month, you must change the date range on the screen.) You should be comfortable with the program before you begin compiling your transactions for the last six months or a year; you don't want to have to start over after entering several hundred transactions.

Before you begin entering your income and expenditures on *The Home Accountant*, you should sort through your records and decide what budget categories you will use. If you plan to transfer your *Home Accountant* data to *The Tax Advantage*, it is critically important to study the instructions in the program manuals carefully. Your *Home Accountant* categories must *precisely* match those of *The Tax Advantage*. If you later discover an error, however, *The Home Accountant* will allow you to rename categories. If your income

categories do not fit neatly into *Tax Advantage* categories, you can simply enter some items manually when you prepare your taxes.

Moving to spending categories, begin with your fixed expenditures. These are expenses that do not change much and may be impossible to reduce significantly without changing your life style. They may be legal obligations, such as mortgage payments, installment loan payments, insurance premiums, and property taxes. They may be simply unavoidable, like rent, or daycare for a two-income family. Since these expenses are virtually uncontrollable, you can divide them into relatively broad categories.

The object of budgeting is to control cash flow. It is helpful to list your budget categories in order of increasing flexibility. (The Home Accountant will number them in the order you enter them.) That way, when you decide to cut back expenditures, you can start at the bottom of your *Home Accountant* spending report and work up. Since most of your cuts, and hence most of your control, come at the bottom of the list, it may be helpful to be increasingly specific as your categories become more flexible. If you decide to reduce expenditures for dining out, for example, it will be easier to keep tabs on your progress if you separate restaurant meals from your basic food category. Still, it's best not to overanalyze. Too many categories may make your budget so cumbersome that you abandon the whole project. You can add new budget categories later if circumstances change.

A hierarchical budget will help you distinguish between spending for need and spending for pleasure. Some advisers consider as basic such expenses as utilities, food, clothing, transportation, household purchases and supplies, education, recreation personal care, and even club memberships. Others consider such expenditures flexible. Your priorities are entirely up to you, but ranking categories is an important step toward taking control of your budget.

You should definitely budget for major expenditures that occur once or twice a year. Otherwise, they will break your budget for sure. One option is to bank enough each month to cover major expenditures when they occur, just as you pay a certain amount into your mortgage escrow account each month. If, for example, your car insurance bill is \$240 every six months, you could set aside forty dollars each month. A second possibility is to adjust your savings each month (making sure that you save more in months when you do not have major expenses), so that the amount left for everyday expenses remains more or less constant.

Either way, there are problems. You'll want to keep track of your emergency fund and savings separately from the money you've set aside to pay irregular but predictable expenses. Don't use emergency funds and savings for routine expenses. Set up a separate, interest-bearing account to cover large, periodic expenditures. Some people saving for a particular goal, such as buying a new car, set up an account for that specific purpose. This will keep your long-term savings neatly separated, but you may end up with more bank accounts than you want. (*The Home Accountant* will keep track of up to five

active “checkbook” accounts. You can set up additional accounts, in which there are few transactions, as asset accounts.) If you choose to keep your emergency fund and your irregular-expense fund in the same account, *The Home Accountant* offers another solution. The Budget module allows you to budget a closing balance for the end of each month. If you budget carefully, you’ll know you’re dipping into savings if you go below that amount, and the increasing balance each month will reflect your savings.

You began setting up asset and liability accounts to create a balance sheet in the last chapter. Since a balance sheet summarizes all your credits and debits to date, it would seem to make sense to use the same categories as a basis for your income statement. To keep strictly accurate records of all your financial activity, that is what you would do. However, what you are after in a budget is cash flow. You will soon find that your financial life is more intricate than you may have imagined; including fixed assets and long-term liabilities in your income statement will create unnecessary complexities. There is virtue in simplicity.

Consider the Lassiters’ house on Lakeshore Drive in Hagerstown, Maryland. The Lassiters figure it is worth \$102,000. If it appreciates at 10% per year, it adds \$10,000 a year to the Lassiters’ net worth. This money is not available, however, unless the Lassiters borrow against their equity. If they included appreciation in their income statement, it would appear that they were gaining in net worth, even if they were spending themselves into a hole at the rate of \$9,000 a year.

Moreover, what seems to be a simple \$700 monthly payment becomes a very complicated transaction if the Lassiters list their mortgage as a liability in their budget. The mortgage payment is, in reality, not a single transaction, but four. The largest proportion is the interest payment, a simple expense. Then there is the principal payment, which is not an expense but a credit against a liability (the mortgage loan). Principal and interest payments change every month as the amount of the outstanding loan is reduced. Figure 3-1 shows how principal and interest shifted in the first year of the Lassiters’ mortgage. Finally, the Lassiters pay about \$100 a month into an escrow account at the savings and loan. Part of this goes to pay for their home owners insurance, which is not tax-deductible, and part of it is for property tax, which is deductible.

The Lassiters, of course, will take advantage of mortgage deductions in their tax planning. *The Home Accountant* would allow them to enter the payment as a split transaction distributed to four categories. But the complexities of the mortgage payment do not make one whit of difference to the Lassiters’ cash flow or the amount they save each month. The payment is, virtually, an uncontrollable expense; it’s locked in indefinitely. The money goes out and doesn’t come back. Besides, the savings and loan sends a statement at the end of the year detailing the transactions related to the mortgage account, including income and property taxes paid. Even if the Lassiters broke down their mortgage payment into all its components in their

monthly bookkeeping, they would have to reconcile their accounts against the savings and loan's statement.

	Payment	Interest	Principal
1	601.88	583.33	18.55
2	601.88	583.12	18.76
3	601.88	582.90	18.98
4	601.88	582.68	19.20
5	601.88	582.45	19.43
6	601.88	582.23	19.65
7	601.88	582.00	19.88
8	601.88	581.76	20.12
9	601.88	581.53	20.35
10	601.88	581.29	20.59
11	601.88	581.05	20.83
12	601.88	580.81	21.07

Figure 3-1: As the Lassiters' mortgage grows older, their payments on the principal increase, while their interest expense decreases. In the first year, shown here, they primarily pay interest. The Lassiters also pay about \$100 a month into an escrow account, which covers taxes and insurance, bringing their total monthly payment to \$700. Thus, their mortgage payment is actually four transactions: payments for principal, interest, insurance, and taxes.

The simple solution is to treat the mortgage payment as an expense. (They can further simplify their bookkeeping on *The Home Accountant* by entering the mortgage payment as an automatic transaction. The computer will record the payment each time they start a new month.) At tax time, the Lassiters can take the interest and tax deductions from the savings and loan statement. They can add any appreciation, and recalculate the outstanding balance on the mortgage whenever they update their balance sheet and reassess their net worth.

The same logic might apply to automobile loans and other medium- and long-term obligations, provided debt reduction is not one of your financial goals. On most of these loans, principal and interest payments change as the debt is reduced. Unless the loans will be paid off within your budget period—say, a year—the easiest thing to do is to record payments as expenses and make the necessary adjustments when you do your taxes and update your balance sheet. If debt is a significant concern, you will, of course, want to keep track of your progress.

You should include short-term obligations, such as credit card balances, store charge accounts, and short-term loans in your budget as liabilities. You need to keep track of these debts, especially if you do not clear your credit card and charge accounts each month.

The point is that you should tailor your budget to your personal short-term financial objectives without weighing it down with unnecessary complexities. Simplify, simplify.

The Nitty Gritty

By now, you should have at least a tentative idea of where you're headed with your budget. You may have jotted down a list of spending categories arranged by priority. The next step is to begin filling in the numbers.

Your employer has already made a substantial start on your budget. Your paycheck already includes deductions for state and federal income taxes, Social Security (FICA) taxes, and perhaps a health plan or other benefits. The taxes will be reported at the end of the year on your W-2 form, and you may choose to limit your *Home Accountant* budget to aftertax income. If you are self-employed, you must budget for taxes, since you have to write the checks to the IRS yourself. Taxes seem all the more onerous when the money actually passes through your bank account, but they will be much less so if you plan for them, rather than trying to scrounge up the money when the bills come due April 15, June 15, September 15, and January 15.

Last year's tax return is a good place to begin gathering additional information. Here you will find an accurate accounting of your previous year's income, including interest, dividends, and income from investment properties and outside businesses. If you are self-employed, last year's return is probably the safest, most conservative basis for projecting income for the coming year. The relevant figure is Total Income, Line 22 on Form 1040. Adjustments to income and deductions reflect your allocation of after-tax income and will show up elsewhere in your budget. You may need to jiggle the number on Line 22 a bit to bring it up to date.

Even if you plan to budget only your after-tax income, you should check your withholding against your actual tax liability. Many people deliberately overwithhold to get a fat refund. This amounts to an interest-free loan to the government, which makes no financial sense. Put the money in the bank and collect interest, or use it to pay off debts, so you don't have to *pay* interest for the privilege of lending money to the government. You can get information on state income taxes from your state form. Withholding for Social Security tax is usually accurate. It's on your W-2 form.

Follow along with the Lassiters as they begin to put together their budget. By way of example, they will show you how to make yours.

Figure 3-2 is the Lassiters' 1983 tax return prepared on *The Tax Advantage*. (You have to transfer the figures to the federal form by hand.) Figure 3-3 is Schedule A, which lists their deductions.

SUSAN AND THOMAS L. LASSITER

*** FORM 1040 U.S. INDIVIDUAL INCOME TAX RETURN 1983 ***

THOMAS L. LASSITER
SUSAN L. LASSITER

SSN:444-55-6666
SSN:555-99-1234

505 LAKESHORE DR.
HAGERSTOWN, MD 55555

YOUR OCCUPATION : PRINCIPAL
SPOUSE'S OCCUPATION : EDITOR

> FILING STATUS <

1. ☐ SINGLE
2. ☒ MARRIED FILING JOINT RETURN
3. ☐ MARRIED FILING SEPARATE RETURN
4. ☐ HEAD OF HOUSEHOLD
5. ☐ QUALIFYING WIDOW(ER)

> EXEMPTIONS <

6A ☒-YOURSELF ☐-65 OR OVER ☐-BLIND NUMBER CHECKED
6B ☒-SPOUSE ☐-65 OR OVER ☐-BLIND ON 6A AND B. . [2]
6C NUMBER OF YOUR DEPENDENT CHILDREN WHO LIVED WITH YOU [0]
6D NUMBER OF OTHER DEPENDENTS [0]
6E TOTAL NUMBER OF EXEMPTIONS CLAIMED [2]

> INCOME <

7	WAGES	7	60,800	I
8	INTEREST INCOME [B]	8	996	I
9A	DIVIDENDS [B]	9A	642	I
9B	EXCLUSION	9B	0	
9C	SUBTRACT	9C	642	
10	TAX REFUNDS	10	482	I
11	ALIMONY RECEIVED	11	0	
12	BUSINESS [C]	12	-1,541	I
13	CAPITAL GAIN [D]	13	0	
14	40% CAP. GAIN DISTR.	14	0	
15	SUPPLEMENTAL GAINS	15	0	
16	FULLY TAXABLE PENS.	16	0	
17A	OTHER PENSIONS	17A	0	
17B	TAXABLE AMOUNT	17B	0	
18	SUPPLEMNT. INCOME [E]	18	0	
19	FARM INCOME	19	0	
20A	UNEMPLOYMENT COMPEN.	20A	0	
20B	TAXABLE AMOUNT	20B	0	
21	OTHER INCOME	21	0	
22	TOTAL INCOME	22	61,379	

> ADJUST. TO INCOME <

23	MOVING EXPENSE	23	0	
24	EMPLY. BUS. EXP.	24	0	
25A	IRA	25A	4,000	
25B	PAYMENTS IN 1984	25B	4,000	
26	KEOGH	26	0	
27	INTEREST PENALTY	27	0	
28	ALIMONY PAID	28	0	
29	MARRIED COUPLE [W]	29	2,516	I
30	DISABILITY EXCLUS.	30	0	
31	TOTAL ADJUSTMENTS	31	6,516	

> ADJUST. GROSS INCOME <

32	ADJUSTED GROSS	32	54,863	
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SUSAN AND THOMAS L. LASSITER

*** FORM 1040 U.S. INDIVIDUAL INCOME TAX RETURN 1983 ***

THOMAS L. LASSITER
SUSAN L. LASSITER

SSN:444-55-6666
SSN:555-99-1234

> TAX COMPUTATION <

33	FROM LINE 32.	33	54,863
34A	DEDUCTIONS [A].	34A	8,378 I
34B	ALLOW. CHAR. CONTR.	34B	0
35	SUBTRACT.	35	46,485
36	EXEMPTIONS * \$1000.	36	2,000
37	TAXABLE INCOME.	37	44,485
	INCOME AVERAGE [G].		
38	TAX	38	9,870 T
39	ADDITIONAL TAXES.	39	0
40	TOTAL	40	9,870

> CREDITS <

41	ELDERLY	41	0
42	FOREIGN TAX	42	0
43	INVESTMENT.	43	0
44	POLITICAL CONTRIB.	44	0
45	DEPENDENT CARE.	45	0
46	JOBS CREDIT	46	0
47	RESIDENTIAL ENERGY.	47	0
48	TOTAL CREDITS	48	0
49	BALANCE	49	9,870

> OTHER TAXES <

50	SELF EMPLOYMENT [SE].	50	0
51	ALT. MINIMUM TAX.	51	0
52	RECAP. INVEST. CREDIT	52	0
53	SOC. SEC. TAX ON TIP.	53	0
54	UNCOLL. TAXES ON TIP.	54	0
55	IRA	55	0
56	TOTAL TAX	56	9,870

> PAYMENTS <

57	FED. TAX WITHHELD	57	10,549
58	ESTIMATED TAX PAYM.	58	0
59	EARNED INCOME CREDIT.	59	0
60	FORM 4868	60	0
61	EXCESS FICA & RRTA.	61	0
62	CRDT. FOR TAX ON FUEL.	62	0
63	REG. INVEST. CO.	63	0
64	TOTAL	64	10,549
65	* OVERPAID *.	65	679
66	REFUNDED TO YOU	66	679
67	APPLIED TO 1984	67	0
68	* AMOUNT YOU OWE *.	68	0

Figure 3-2: The Lassiters' 1983 federal tax return, prepared on *The Tax Advantage*, provides an accurate summary of their earnings for the year. Remember to add any tax-free income, such as interest on tax-free bonds.

SUSAN AND THOMAS L. LASSITER

*** SCHEDULE A - ITEMIZED DEDUCTIONS 1983 ***

THOMAS L. LASSITER
SUSAN L. LASSITER

SSN:444-55-6666
SSN:555-99-1234

> MEDICAL & DENTAL <

1	MEDICINES & DRUGS	1	0
2	1% 1040 LINE 33.	2	547
3	SUBTRACT.	3	0
4A	DOCTORS ETC.	4A	2,923 I
4B	TRANSPORTATION.	4B	49
4C	OTHER MEDICAL	4C	0
5	ADD	5	2,972
6	5% 1040 LINE 33.	6	2,736
7	SUBTRACT.	7	236

> TAXES <

8	STATE & LOCAL INCOME.	8	2,978
9	REAL ESTATE	9	734
10A	GENERAL SALES	10A	315
10B	MOTOR VEHICLES.	10B	0
11	OTHER TAXES	11	0
12	ADD	12	4,027

> INTEREST EXPENSE <

13A	HOME MORTGAGE INST.	13A	6,936
13B	HOME MORTGAGE INDV.	13B	0
14	CREDIT CARDS.	14	0
15	OTHER INTEREST EXP.	15	34 I
16	ADD	16	6,970

> CONTRIBUTIONS <

17A	CASH CONTRIBUTIONS.	17A	25
17B	CASH OVER \$3000	17B	0
18	OTHER THAN CASH	18	145
19	CARRYOVER	19	0
20	ADD	20	170

> CASUALTY AND THEFT <

21	CASUALTY OR THEFT	21	0
----	-----------------------------	----	---

> MISCELLANEOUS <

22	DUES.	22	0
23	TAX RETURN PREP. FEE.	23	0
24	OTHER DEDUCTIONS.	24	526 I
25	ADD	25	526

> SUMMARY <

26	ADD	26	11,929
27	STANDARD DEDUCT.	27	3,400
28	TOTAL DEDUCTION	28	8,529

Figure 3-3: Schedule A, also prepared on *The Tax Advantage*, lists the Lassiters' deductions. They must budget a substantial sum for Tom's therapy, which accounts for most of the medical deduction. (His medical insurance pays only 50% of the bills.) Their state income tax is listed on line 8.

The Lassiters' total income was \$61,379. However, Susan showed a loss of \$1,541 on her freelance writing (Line 12), only because she deducted the full cost of her Apple computer. The Lassiters conservatively decide to assume

she will break even in 1984, pushing the total income to \$62,920. Although the Lassiters received a \$679 federal refund in 1983, Susan's freelance loss will eliminate it. They decide not to adjust their withholding. Both expect raises in the fall, but they have not yet received them, so they do not include them in their budget. To compute their after-tax monthly income, they fill out the following form in Figure 3-4. Figure 3-5 is for you.

Gross Income.....	\$62,920
Less	
Federal Tax (Line 49).....	9,870
State & Local Income	
(Schedule A, Line 8).....	2,978*
FICA (From W-2)	<u>4,074</u>
Total taxes	<u>16,922</u>
After-tax income	\$45,998
Monthly (divided by 12)	<u>\$ 3,833</u>
* Their state refund is listed as income on Line 10 of Form 1040, so it washes out.	

Figure 3-4: The Lassiters calculate their monthly after-tax income. They do not include deductions, which are expenditures that will appear elsewhere in their budget. Their gross income of \$62,920 yields a spendable income of \$3,833. They are being conservative by excluding expected raises and Susan's freelance income.

Gross Income.....	_____
Less	
Federal Tax (Line 49).....	_____
State & Local Income	
(Schedule A, Line 8).....	_____
FICA (From W-2)	_____
Total taxes	_____
After-tax income	_____
Monthly (divided by 12)	_____

Figure 3-5: Your federal tax return includes the information you need to calculate your spendable, after-tax income. Do subtract your deductions; they will be spending items elsewhere in your budget.

You will need to know your marginal tax rate, or tax bracket, when you make many financial decisions. By pressing T (Tax) on *The Tax Advantage*, the Lassiters learn that their marginal tax rate for 1983 was 35%. The 1984 tax reduction would reduce that to 33%. Adding 5% (the top income tax bracket in Maryland), their state and federal bracket will be 38% if their income does not increase. However, with a taxable income of \$44,485, the Lassiters are on the verge of creeping into the next bracket, which begins at \$45,800. The 1984 marginal tax rate for that income level is 38%. Adding 5% for state income tax, the Lassiters will be in a combined state and federal tax bracket of 43% unless they take steps to reduce their taxes. For further discussion about estimating taxes and tax planning, see the chapter on tax planning.

Going through their paycheck stubs, credit card bills, and returned checks, the Lassiters choose four *Tax Advantage* income categories: WAGES/T for their paychecks, RECEIPTS GROSS/T/A for Susan's freelance income, INTEREST/T for the interest on their bank money market account, and DIVIDENDS/T for the income from XYZ Mutual Fund. Next, they set up Checkbook accounts for Susan and Tom's accounts and for their bank money market account. (They might also set up an account for the mutual fund if there were a significant number of transactions in it.) Finally they enter a reasonably manageable fifteen expense accounts, arranged in order, from the inflexible mortgage and auto loan payments to a discretionary miscellaneous account, which will consist of their cash expenditures and odds and ends.

First, the Lassiters enter their mortgage and car loan payments as automatic monthly transactions in their money market account (Figure 3-6). Now comes the tedious part. Since they have not used *The Home Accountant* before, they must record all of their transactions for the last six months.

```

** HOME ACCOUNTANT **
CHECKBOOK
MONEY MARKET ACCOUNT  JAN 1984
AUTOMATIC

MODE      1)CHECK  2)DEPOSIT  3)END

A DATE      01/01/84 (M)MODE
B CHECK #    X1
C PAID TO    HOME S&L
D AMOUNT     700.00
E MEMO
F CATEGORY   MORTGAGE
G TAX(Y/N)   N
H CLEARED    N

LETTER TO CHANGE(A-H)
(X)CANCEL (P)PRINT (R)RECORD (M)MODE
ENTER SELECTION

N

```

Figure 3-6: The Lassiters set up automatic transactions for their monthly mortgage payment (shown) and their loan on the Volvo. This saves keystrokes but does not reflect the actual transaction accurately, unless the bills are paid on time.

Now comes Susan's checking account. Susan's deposits for January are pretty straightforward. She received two regular paychecks of \$930.75, as well as \$250 for an article on clam-digging for *Country* magazine (which was quite well-received in clam-digging circles). Figure 3-7 is her *Home Accountant* Deposit Activity Report for the month.

CHECKBOOK TRANSACTIONS DEPOSIT ACTIVITY REPORT FOR SUSAN LASSITER JUN 20, 1984						
TRAN DATE	ITEM # NAME	AMOUNT	MEND	CATEGORY	TAX	CLR PTD
1 01/06/84	PAYCHECK	930.75		WAGES/T	Y Y N	
2 01/20/84	PAYCHECK	930.75		WAGES/T	Y Y N	
3 01/23/84	COUNTRY MAGAZINE	250.00	CLAMDIGGER	RECEIPTS GROSS/T	Y Y N	
		TOTAL	2111.50			

Figure 3-7: Susan Lassiter's *Home Accountant* Deposit Activity Report for January: two paychecks and payment for a freelance story on clam digging.

Next, the Lassiters go through Susan's checks for January: a toilet stopcock at Sears, Home Repairs; groceries at Safeway, Food; a subscription to the *Clarion Bugle*, Publications; a flush valve (still trying to fix the toilet), Home Repairs;...a battery at Western Auto, Car Expenses;...another flush valve (still trying), Home Repairs;...and so on. Figure 3-8 Susan's January Check Activity Report. The three entries for 0.00 at the bottom are dummy transactions which she has entered, in case additional expenditures show up after she moves on to her February checks. (*The Home Accountant*, remember, allows you to edit transactions after you've closed out a month, but not to enter new ones.) Note the three right-most columns. Susan has marked tax deductible expenditures (professional publications, in this case). Since she is recording cancelled checks, all of the transactions have cleared. The PTD column indicates whether a particular check has been printed on *The Home Accountant*. The Lassiters have not been using this feature.

The Lassiters go on to record Tom's checks, credit card purchases, and transactions through the money market account for January in similar detail. After two Saturday afternoons at the computer (nobody said this was going to be easy), they have recorded their transactions for six months, from January through June. If six months of transactions is more than you're willing to record, start with three.

The First Draft

The Lassiters are, at last, ready to extract some useful budget information from their computer. First, they print out their actual activity report. Page 3, reporting their after-tax income, is shown in Figure 3-9. (Pages 1 and 2 cover

CHECKBOOK TRANSACTIONS
CHECK ACTIVITY REPORT
FOR SUSAN LASSITER
JUN 20, 1984

TRAN DATE	ITEM # NAME	AMOUNT	MEMO	CATEGORY	TAX CLR PTD
1 01/02/84 324	SEARS	11.42	STOPCOCK	HOME REPAIRS	N Y N
2 01/03/84 325	SAFWAY	15.40	GROCERIES	FOOD	N Y N
3 01/04/84 326	CLARION BUGLE	42.00	SUBSCRIPTION	PUBLICATIONS	N Y N
5 01/05/84 327	SEARS	12.25	FLUSH VALVE	HOME REPAIRS	N Y N
6 01/08/84 328	CORNER NEWS	6.75	NY TIMES ESQ	PUBLICATIONS	Y Y N
7 01/08/84 329	ACE EXTERMINATING	35.00	TERMITE INSPECTION	HOME REPAIRS	N Y N
8 01/08/84 330	BELL	145.29	PHONE BILL	TELEPHONE	N Y N
9 01/09/84 331	SAFWAY	37.08	GROCERIES	FOOD	N Y N
10 01/11/84 332	SAFWAY	40.95	GROCERIES	FOOD	N Y N
11 01/13/84 333	SOULTIER	33.18	SHOES	CLOTHES	N Y N
12 01/13/84 334	WESTERN AUTO	44.60	BATTERY	CAR EXPENSES	N Y N
13 01/15/84 335	CORNER NEWS	4.11	NEWS GATHERING	PUBLICATIONS	Y Y N
14 01/16/84 336	SAFWAY	17.73	GROCERIES	FOOD	N Y N
15 01/17/84 337	SELF	50.00	CASH	MISCELLANEOUS	N Y N
16 01/19/84 338	BEST	23.43	RACQUETBALL RACQUET	ENTERTAINMENT	N Y N
17 01/19/84 339	WALDENBOOKS	21.63	BOOKS	PUBLICATIONS	N Y N
18 01/21/84 340	SAFWAY	22.10	GROCERIES	FOOD	N Y N
19 01/23/84 341	ACME HARDWARE	12.16	FLUSH VALVE	HOME REPAIRS	N Y N
20 01/23/84 342	APROPPOS	25.48	BLOUSE	CLOTHES	N Y N
21 01/23/84 343	FOODMART	31.76	GROCERIES	FOOD	N Y N
22 01/27/84 344	COURTSIDE	30.00	DUES	ENTERTAINMENT	N Y N
23 01/27/84 345	SAFWAY	16.96	GROCERIES	FOOD	N Y N
26 01/20/84 346	MONEY MARKET ACCT	1000.00		CHECKBOOK #3	N Y N
31 01/04/84 NONE	SELF	50.00	CASH	MISCELLANEOUS	N Y N
32 01/26/84 NONE	SELF	50.00	CASH	MISCELLANEOUS	N Y N
33 01/12/84 NONE	SELF	50.00	CASH	MISCELLANEOUS	N Y N
60 01/12/84 349		0.00		NO CATEGORY	N N N
61 01/12/84 350		0.00		NO CATEGORY	N N N
62 01/12/84 351		0.00		NO CATEGORY	N N N
		TOTAL	1829.28		

Figure 3-8: Susan Lassiter's January Check Activity Report. She spent \$1,829, including a \$1,000 transfer to the money market account, where the Lassiters keep their savings and funds set aside for large bills.

ACTUAL FOR SUSAN & TOM LASSITER JUL 15, 1984														
PAGE 3	INCOME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
	WAGES/T	3488	3488	4419	3488	3488	3488	0	0	0	0	0	0	21859
	RECEIPTS GROSS/T/*	250	0	0	500	0	200	0	0	0	0	0	0	950
	INTEREST/T	108	103	93	93	97	99	0	0	0	0	0	0	593
	DIVIDENDS/T	130	0	0	129	0	0	0	0	0	0	0	0	259
	TOTAL INCOME	3976	3591	4512	4210	3585	3787	0	0	0	0	0	0	23661

Figure 3-9: The Lassiters' actual income report for the first six months of 1984. Their monthly average is \$3,943, or \$110 more than they had figured from their tax return. The difference (and then some) is Susan's \$950 in freelance income.

assets and liabilities, which are not directly related to cash flow.) The jump in WAGES/T for March occurred because Susan, who gets paid every two weeks, received three paychecks that month. Dividing the total by six, they find that their after-tax income averages \$3,943 a month, \$110 more than they figured from their tax return. Susan's \$950 in free-lance income accounts for the difference. In fact, they would have fallen below the tax-form projection, if not for that.

The free-lance income is erratic and unpredictable. The Lassiters decide, conservatively, to budget \$3,850 for after-tax income and enter that amount for the coming months through the budget module of *The Home Accountant*. They will add their raises when they come, since they are careful not to budget money before they know it's coming and to take into account the tax man's bite.

Figure 3-10, the Lassiters' actual expense report, summarizes their spending for the last six months. The mortgage and car payments, of course, are rock solid. Utilities have plunged, reflecting the decline of the heating bill. Several categories are extremely erratic—telephone, clothes, car expenses, and furnishings, for example. Predictably, the two-week scuba trip to Cozumel to escape the slush of February knocked the budget for a loop that month. Overall, however, the Lassiters have taken in \$2,664 more than they have spent for the six months, representing an average of \$444 in savings per month.

PAGE 4

ACTUAL FOR
SUSAN & TOM LASSITER
JUL 15, 1984

EXPENSE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
MORTGAGE	700	700	700	700	700	700	0	0	0	0	0	0	4200
VOLVO LOAN	246	246	246	246	246	246	0	0	0	0	0	0	1476
UTILITIES	392	347	212	195	97	67	0	0	0	0	0	0	1310
TELEPHONE	145	102	64	183	175	88	0	0	0	0	0	0	757
FOOD	228	214	265	283	269	302	0	0	0	0	0	0	1561
DOCTORS ETC/T	250	132	250	310	250	275	0	0	0	0	0	0	1467
CLOTHES	295	124	46	193	191	211	0	0	0	0	0	0	1060
CAR EXPENSES	370	213	38	23	0	95	0	0	0	0	0	0	739
HOME REPAIRS	71	0	0	127	0	563	0	0	0	0	0	0	761
PUBLICATIONS	74	23	38	26	67	26	0	0	0	0	0	0	254
ENTERTAINMENT	120	69	106	122	102	169	0	0	0	0	0	0	688
DINING OUT	146	46	58	51	78	126	0	0	0	0	0	0	505
VACATIONS	0	2734	0	0	0	0	0	0	0	0	0	0	2734
FURNISHINGS	126	0	0	632	0	0	0	0	0	0	0	0	758
MISCELLANEOUS	447	378	480	475	536	411	0	0	0	0	0	0	2727
TOTAL EXPENSE	3610	5328	2503	3566	2711	3279	0	0	0	0	0	0	20997
NET INCOME	366	1737	2009	644	874	508	0	0	0	0	0	0	2664

Figure 3-10: The Lassiters' actual expense report. Some categories are relatively stable, but they will need to examine the bumpier ones more closely before establishing budget amounts.

Since advisers give savings top priority and recommend saving at least 5%—preferably 10%—of after-tax income, the Lassiters decide to check their spending against that benchmark before going further. Their Income & Expense Summary (Figure 3-11) shows that their after-tax income for the six

months was \$23,661. The expense portion of the summary (Figure 3-12) tells them that their \$2,664 in savings is more than 11% of their take-home pay—not bad considering they dropped \$2,700 on a trip they obviously won't repeat this year. There is probably no need for radical surgery on their spending habits.

INCOME & EXPENSE SUMMARY FOR 6 MONTH(S) ENDED JUN 1984 SUSAN & TOM LASSITER		
PAGE 1		
INCOME	JUN '84	PCT.
WAGES/T	21859	92.4
RECEIPTS GROSS/T/*	950	4.0
INTEREST/T	593	2.5
DIVIDENDS/T	259	1.1
TOTAL INCOME	23661	100.0
	=====	=====

Figure 3-11: Income portion of Income & Expense Summary breaks down income for the period by category. Susan's free-lancing contributed a substantial 4% to the household budget, but the Lassiters decide not to budget future free-lance income because of its unpredictability.

INCOME & EXPENSE SUMMARY FOR 6 MONTH(S) ENDED JUN 1984 SUSAN & TOM LASSITER		
PAGE 2		
EXPENSE	JUN '84	PCT.
MORTGAGE	4200	17.8
VOLVO LOAN	1476	6.2
UTILITIES	1310	5.5
TELEPHONE	757	3.2
FOOD	1561	6.6
DOCTORS ETC/T	1467	6.2
CLOTHES	1060	4.5
CAR EXPENSES	739	3.1
HOME REPAIRS	761	3.2
PUBLICATIONS	254	1.1
ENTERTAINMENT	688	2.9
DINING OUT	505	2.1
VACATIONS	2734	11.6
FURNISHINGS	758	3.2
MISCELLANEOUS	2727	11.5
TOTAL EXPENSE	20997	88.7
	=====	=====
NET INCOME	2664	11.3
	=====	=====

Figure 3-12: Expense report from the Income & Expense Summary shows that the Lassiters saved 11.3% of their take-home pay, even though they spent more than \$2,700 on a vacation in Cozumel. This good news means they will have considerable flexibility in their budget.

What about runaway budget categories? Are expenditures accelerating dangerously in any of them? *Home Accountant* graphs will help spot trends that may not be immediately obvious from numbers that jump up and down from month to month. There are three kinds: bar graphs, useful for compar-

ing actual expenditures to budgets; line graphs, which give a visual representation of peaks and valleys and allow you to compare up to three budget categories (see Figure 3-13); and trend graphs, which extrapolate projections from line graphs.

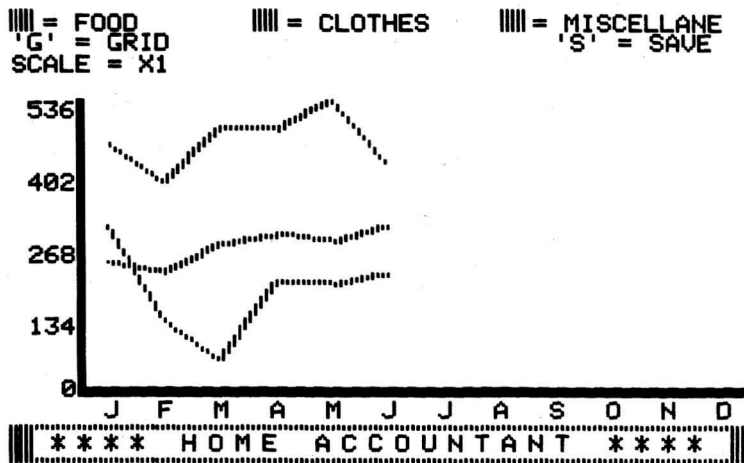


Figure 3-13: *The Home Accountant* will print line graphs of up to three budget categories on one grid. Food, Clothes, and Miscellaneous are graphed here.

The Lassiters decide to use the graphs as an aid in budgeting their more erratic expenditures. For utilities, for example, they will enter their best guesses of future bills. For less predictable expense categories, they will budget average amounts each month. When the time comes to decide on a substantial expenditure, they will be able to compare their cumulative expenditures in that category against their budget to determine how much they can afford to spend.

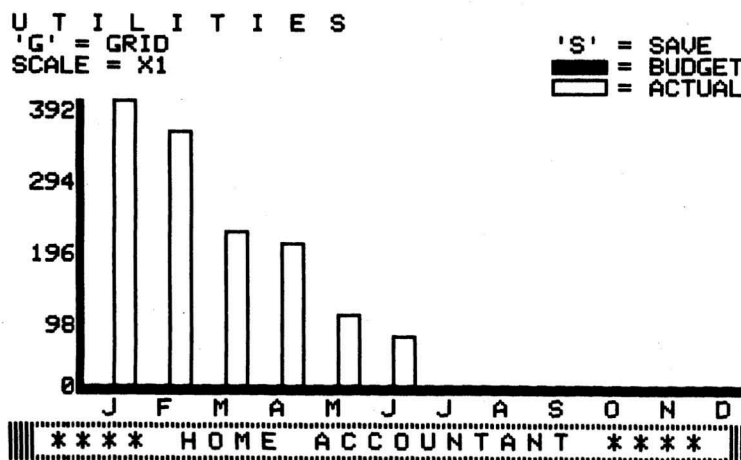


Figure 3-14: Bar graph of the Lassiters' utility expenses shows a seasonal decline. They will estimate future bills and enter them through the budget module.

Figures 3-14 and 3-15 are a bar graph and a line graph of the Lassiters' utilities expenditures. The rapid decline, of course, is entirely seasonal. If the trend continued, the gas company would be paying them money by August. (*The Home Accountant* can't think; it just assumes trends will continue.) The Lassiters figure their electric bills will go up in July, August, and September (because of air conditioning), will decline in the fall, and then will rise again as winter sets in. (Each month's bill covers consumption for the previous month.) The Lassiters enter guesstimates through the budget module.

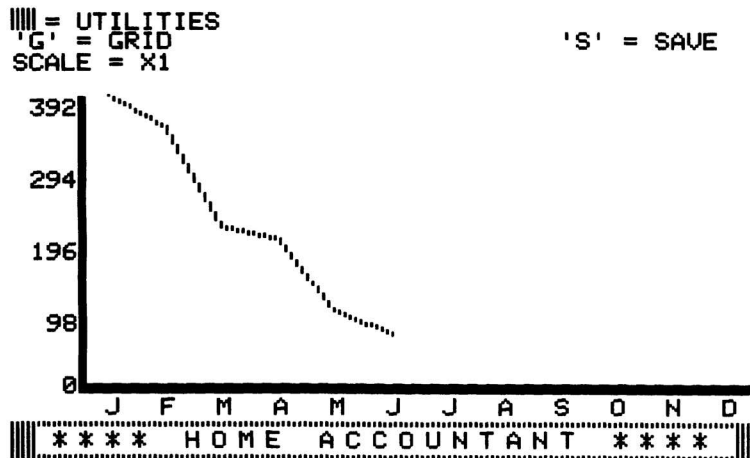


Figure 3-15: Line graph of the Lassiters' utility bill indicates a sharp decline in the spring because of lower gas bills. A trend line would show negative utility bills within a month or two—a trend that obviously will not continue.

Trend graphs of telephone and miscellaneous expenses (Figures 3-16 and 3-17) show slight, but not alarming, trends upward. The Lassiters decide to budget slightly less than the average for the last six months, \$125 and \$450 a month respectively. Most of the Lassiters miscellaneous transactions are in cash.

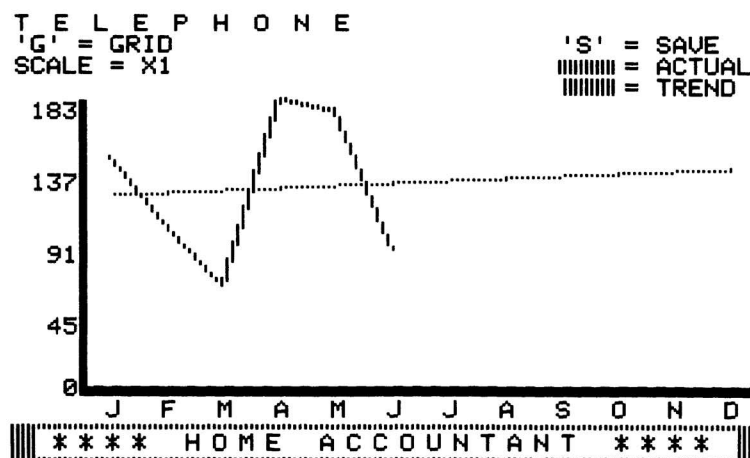


Figure 3-16: Trend graph of erratic telephone expenses indicates a slight upward trend. The Lassiters decide to budget slightly less than the average for the last six months.

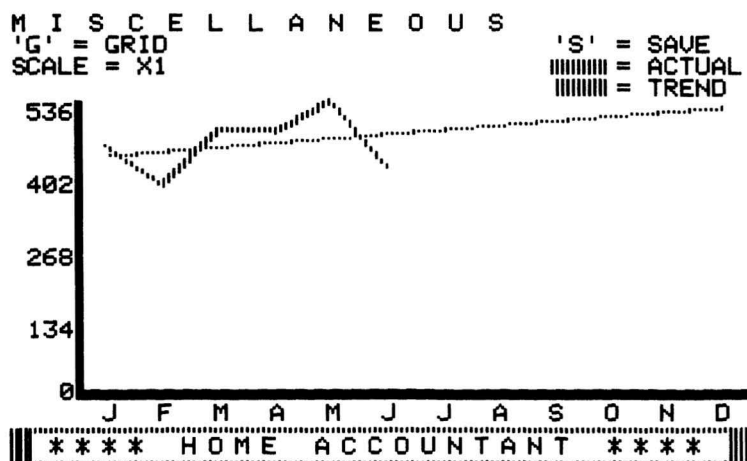


Figure 3-17: The Lassiters' miscellaneous spending is also increasing slightly. They decide to try to hold the line. Most of their miscellaneous spending is in cash. If they wanted to cut back, they could keep closer track of how they are spending this money by recording transactions in their cash accounts.

In the category of food, the Lassiters encounter their first instance of expenditures that may be rising too rapidly. Looking at the numbers in their actual expense report, June's \$302 appears as if it may be merely an aberration. An upward trend is somewhat more evident in the bar and line graphs (Figures 3-18 and 3-19). The trend graph (Figure 3-20), however, shows that their food bill could increase from \$228 in January to about \$400 by the end of the year. (The dip in February is no doubt due to the Lassiters' vacation.) They decide to budget \$275 a month for food, slightly more than their \$260 average for the first six months of the year.

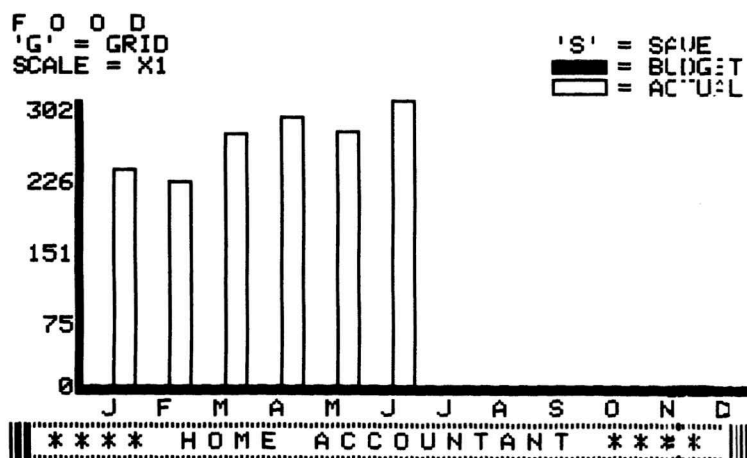


Figure 3-18: The Lassiters' food expenditures are increasing, but it's unclear from the bar graph whether the trend is cause for concern.

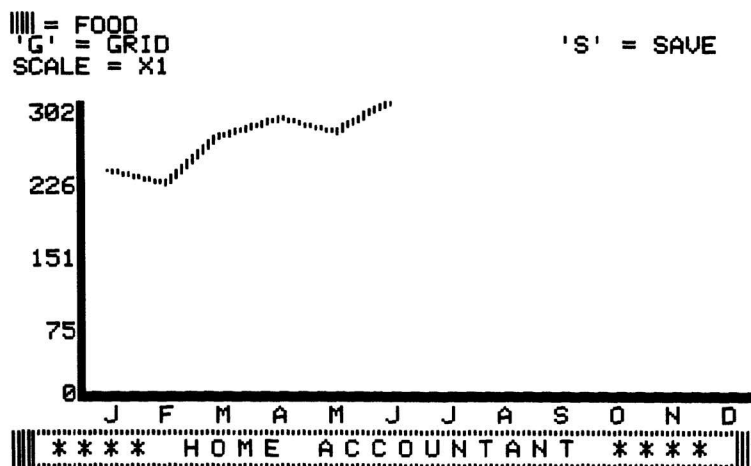


Figure 3-19: A line graph of food expenditures shows the upward trend more clearly.

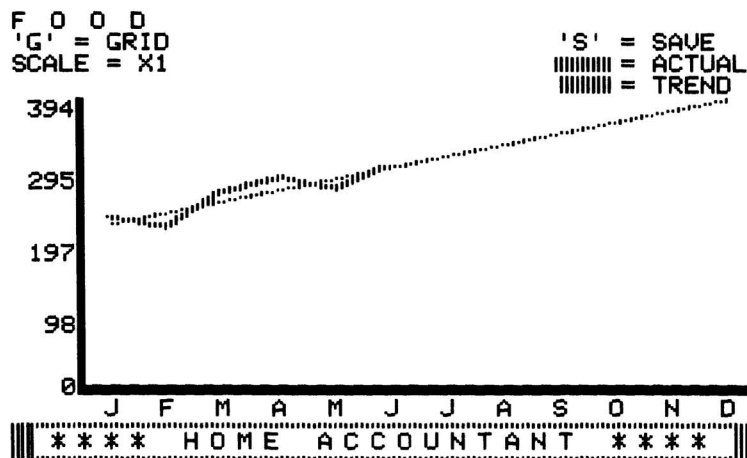


Figure 3-20: A trend graph of food spending indicates that the Lassiters may be headed for trouble in this category. If the current trend continues, their monthly expenditures for food may nearly double in the course of a year.

Continuing in this fashion, the Lassiters complete a tentative budget. Their projected income, without raises or Susan's free-lance income, is shown in Figure 3-21. Their expense budget is shown in Figure 3-22. (Pages 1 and 2 of *The Home Accountant* budget printout, showing assets and liabilities, are not shown.) The bump in the car expenses budget for August reflects the semiannual insurance bill they know will be due that month. Essentially, their budget reflects their earning and spending patterns for the first half of the year, minus their vacation and Susan's free-lance income.

If you've been following along, you should now have your basic budget for the period you've chosen recorded on *The Home Accountant*. What does it mean?

BUDGET FOR
SUSAN & TOM LASSITER

INCOME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
WAGES/T	0	0	0	0	0	0	3643	3643	3643	3643	3643	3643	21858
RECEIPTS GROSS/T/*	0	0	0	0	0	0	0	0	0	0	0	0	0
INTEREST/T	0	0	0	0	0	0	100	100	100	100	100	100	600
DIVIDENDS/T	0	0	0	0	0	0	130	0	0	130	0	0	260
TOTAL INCOME	0	0	0	0	0	0	3873	3743	3743	3873	3743	3743	22718

Figure 3-21: The Lassiters' income budget includes neither their expected raises nor any freelance income. Taking a conservative approach, they are not budgeting money before they are certain it will materialize.

BUDGET FOR
SUSAN & TOM LASSITER

EXPENSE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
MORTGAGE	0	0	0	0	0	0	700	700	700	700	700	700	4200
VOLVO LOAN	0	0	0	0	0	0	246	246	246	246	246	246	1476
UTILITIES	0	0	0	0	0	0	100	125	150	75	125	225	800
TELEPHONE	0	0	0	0	0	0	125	125	125	125	125	125	750
FOOD	0	0	0	0	0	0	275	275	275	275	275	275	1650
DOCTORS ETC/T	0	0	0	0	0	0	250	250	250	250	250	250	1500
CLOTHES	0	0	0	0	0	0	175	175	175	175	175	175	1050
CAR EXPENSES	0	0	0	0	0	0	100	312	100	100	100	100	913
HOME REPAIRS	0	0	0	0	0	0	100	100	100	100	100	100	600
PUBLICATIONS	0	0	0	0	0	0	50	50	50	50	50	50	300
ENTERTAINMENT	0	0	0	0	0	0	125	125	125	125	125	125	750
DINING OUT	0	0	0	0	0	0	80	80	80	80	80	80	480
VACATIONS	0	0	0	0	0	0	0	0	0	0	0	0	0
FURNISHINGS	0	0	0	0	0	0	125	125	125	125	125	125	750
MISCELLANEOUS	0	0	0	0	0	0	450	450	450	450	450	450	2700
TOTAL EXPENSE	0	0	0	0	0	0	2901	3139	2951	2876	2926	3026	17819
NET INCOME	0	0	0	0	0	0	972	604	792	997	817	717	4899

Figure 3-22: The Lassiters' spending budget for the second half of the year shows a surplus of \$4,899—more than 22% of their projected after-tax income. It is very likely that Christmas, big-ticket items, and unbudgeted expenses will cut deeply into this figure. They can expect it to take a year to get the bugs out of their budget. However, they appear to be living well within their means and to have cash available to devote to long-term goals.

How Are We Doing?

You were promised this would be like a strategy game. It's time to tally the score at the end of the second inning. (The first was toting up your net worth.) Keeping up with the Vanderbilts is beyond the power of financial planning. But are you keeping up with the Lassiters?

If you've been working up your budget along with the Lassiters, you should now have a fairly clear idea where the money's coming from and where it's going. An executive I know discovered at this point that his miscellaneous category came to more than \$2,000 a month. Two sofas here, a fur coat there....

He concluded he needed to think some more about his budget categories. To discover you're spending \$2,000 a month on "miscellaneous" is not to discover where your money is going.

You may discover that your records are inadequate for effective budgeting. Budget experts suggest that spending more than 30% of your after-tax income in cash will make it nearly impossible to keep adequate records. That's a pretty generous allowance. One solution is to use checks or credit cards for all expenditures over \$10. (You must be careful, however, not to spend more than you would in cash. Certainly you should not increase credit card purchases if you are not clearing your bills each month. Borrowing money at 18% to cover daily expenditures is not a good deal.) A second alternative is to keep records on your cash expenditures. This is a bit tedious, but you can make notes on your cash register receipts, then record your transactions every few days in your *Home Accountant* cash accounts. The result will look very much like Susan Lassiter's Check Activity Report (Figure 3-8).

If you're having trouble with records on the income side of your budget, the solutions may be a little more complicated. If you're in the habit of taking, say, \$50 in cash every time you deposit your paycheck, your bank records will not reflect your income accurately. You can create a record by depositing the entire paycheck, then withdrawing money in a second transaction. That way, the full paycheck and the withdrawal will appear on your monthly statement.

You may also have difficulty keeping track of your income if you don't always deposit checks in the same account. *The Home Accountant* will sort this out for you. Wherever you deposit the check, you simply assign it to the appropriate income category (WAGES/T, for example). Still, you might consider setting up an account, perhaps a bank money market account, for depositing checks and keeping funds set aside for erratic expenditures, such as vacations. You would then periodically transfer funds to your checking accounts to cover routine expenses and to a separate account for savings. This will not only simplify your income records but also segregate your savings so you do not inadvertently dip into them. You have to weigh the disadvantages of a proliferation of bank accounts against the need for better records.

For most people, an accurate spending record should produce few big surprises. Some people do manage to get over their head in debt or spend down their savings, apparently unawares. The offices of credit counselors are filled with them. Having a lot of money does not make the rich immune from overspending. *The New York Times* recently reported on a California couple who make \$400,000 a year, mostly from dividends on inherited stock. They live well and spend about \$25,000 a year on travel. The month before the *Times* article appeared they discovered, to their surprise, that they owed the IRS \$165,000. They were so embarrassed at their lack of foresight that they refused to allow their names to be used.

You probably have your cash flow in at least a tenuous balance. That's no mean feat these days. But are you spending more than you should—or really

want to—in some categories? Could you be saving more or advancing more quickly toward your goals? If you ate out less often, could you head for Cozumel next February instead of the following year?

Even if you have a healthy surplus in assets, your spending may have crept over your income. It doesn't take a genius to see you can't go on like this forever. Feeling guilty won't help. Most people spend more than they earn during some periods without getting into trouble. (It's remarkable, in fact, that the Lassiters' trip to Cozumel didn't put them in the red for the six months.) If your cash flow is negative, however, you need to get back on track. You are spending your savings or, worse, borrowing to cover daily expenses. You must either spend less or find a way to earn more, and spending goals will have to wait. (As we learned from examining marginal tax rates, cutting back may be the easier course.) If you make substantial interest payments, you may want to use savings to pay off debts, bearing in mind the need to keep a cash reserve. You may in effect be borrowing money at 16%, or 18% if it's on a credit card, to take advantage of a 9% investment opportunity. This is not the road to riches.

Are You Over Your Head in Debt?

How much debt is too much? As usual, it depends on your circumstances and which financial adviser you ask. Probably the most common answer is that, aside from a mortgage, debt payments—principal and interest—should not be more than 20% of your after-tax income. Many people find 15% a more comfortable limit. Some advisers recommend a limit of 10% if you are over 65, your net monthly income is less than \$2,000, or your family has only one income. Dime Savings Bank in New York says the limit, *including* mortgage payments, should be 30% of *gross* income. Goldome, another New York savings bank, puts the figure at 35% of gross income, including up to 28% for a mortgage. In many ways, a mortgage is more of an investment than a debt. For holders of large mortgages, the limit on consumer borrowing is fairly low.

There is not as much disagreement here as might appear at first: debt service excluding a mortgage should not be more than 15% to 20% of net income (10% under certain conditions); debt service including a mortgage should not be more than 30% to 35% of gross income.

Some advisers say you should be able to pay off debts other than mortgages within three years; otherwise, interest payments may reach the point that it is difficult to get out of debt. (Nevertheless, four-year financing has become more or less standard for new cars.) Advisers are nearly unanimous in saying that you should not borrow money to pay day-to-day expenses and that the life of the loan should not exceed the life of the asset being financed. Common sense should tell you not to take out a ten-year second mortgage to pay for a car that will be gone before the loan is repaid.

Those in higher income brackets—say, comfortably into six figures—may be able to support a larger debt load. Younger people, still on the steep

incline of the income curve, may also be able to afford relatively larger debts, since they can expect their incomes to rise to meet the payments. Children, on the other hand, may decrease a family's ability to carry debt, since they add substantially to routine expenses.

In the final analysis, debt limits are a personal matter. You can probably obtain more credit than you would find it comfortable to repay. Your *Home Accountant* budget can give you a clearer idea of how much debt you can afford than guidelines from the experts. The budget tells you how much you have left each month after routine expenditures. If this figure is substantially above your savings objectives, you may be able to handle more debt comfortably. Caution is in order, however. Remember that it may be some time before your budget is fully adapted to your actual spending. Moreover, you must be able to carry the payments for an extended period, perhaps ten years or longer for a second mortgage. Thus, you must weigh new debt not only against your current budget, but also against your projections. It may be wise to defer any decision to take on substantial new debt until your financial plan is more thoroughly mapped out.

If you are already stretching your borrowing capacity, you may not even need a budget to spot the danger signs. Are you having difficulty saving even small amounts regularly? Would the demise of a major appliance send you scrambling for cash to replace it? Are you paying only the minimum on your credit card bills? Do you sometimes have to juggle payments to keep creditors at bay? Are you finding it increasingly difficult just to make ends meet? If you answer yes to any of these, and debt payments are a substantial part of your monthly expenses, you may need to give debt reduction a high priority in your financial planning.

By any of these measures, the Lassiters are in good shape. They were able to spend \$2,700 for a vacation and still end up in the black for the first six months of 1984. They keep their credit cards paid up, and their only monthly debt payments are \$700 for the mortgage and \$246 for the Volvo loan. They have budgeted a monthly income, after taxes, of \$3,833 (see the worksheet above). The \$246 car payment is 6.4% of that. Their budgeted gross monthly income is \$5,243. Their total monthly payments, mortgage plus the car loan, are \$946, or about 18% of gross income. The mortgage alone is about 13% of gross income.

The Lassiters, it appears, are getting along famously.

Comparing (NOT Keeping Up) With the Joneses

Like the Lassiters, you may have a healthy operating surplus. Even so, money may be dribbling away unproductively. Saving up for a BMW may be more important to you than spending \$2 a day on junk food in the canteen or having two beers on the way home from work every day. Rule of thumb: if you make over \$50,000, and your expenditures exceed 70% of your gross income, you can probably cut back with relatively few sacrifices.

The Lassiters calculate their gross income for the first six months of 1984 at \$32,385, including Susan's free-lancing. Their expenditures for the period were \$20,997 (Figure 3-10), or about 64% of their gross income. By that measure, they appear to be on a reasonably lean budget. But rules of thumb are always very broad generalizations. The Lassiters, for example, have no children, which liberates a lot of dollars for discretionary spending. The Department of Agriculture figures a five-year-old will cost you about \$4,500 in 1984 and that you can look forward to spending more than \$15,000 in 1997, when the tyke will be seventeen, if inflation averages 8%. That's before you even think about setting aside money for college.

Budgets for Four-Member Urban Families, Fall 1981

	Lower		Middle		Upper	
Budget	15,323	100	25,407	100	38,060	100
Family Consumption	12,069	79	18,240	72	25,008	66
Food	4,545	30	5,843	23	7,366	19
Housing	2,817	18	5,546	22	8,423	23
Transportation	1,311	9	2,372	9	3,075	8
Clothing	937	6	1,333	5	1,947	5
Personal Care	379	2	508	2	719	2
Medical	1,436	10	1,196	5	1,972	5
Other	644	4	1,196	5	1,972	5
Other Items	621	4	1,703	7	1,993	5
Social Security, Disability	1,036	7	1,021	4	1,718	4
Personal Income Taxes	1,596	10	4,443	17	9,340	25

Source: U.S. Bureau of Labor Statistics. This statistical series was discontinued after this report.

Figure 3-23: The U.S. Bureau of Labor Statistics says this chart represents "typical" budgets for urban families of four in the fall of 1981. Chances are your family does not meet the BLS definition of "typical," but such comparisons may give you some insight into your own spending patterns. Bear in mind that BLS does not suggest that these budgets represent what a family budget *ought* to be. For one thing, there's no provision for savings, which definitely should be in your budget.

For the sake of comparison, Figure 3-23 shows what the U.S. Bureau of Labor Statistics considers to be typical family budgets for urban families of four at three income levels. (The figures are for the fall of 1981. They are the last available; the BLS has discontinued the report.) Figure 3-24 compares the Lassiters' budget with several other "typical" budgets. (The numbers have been jiggled around slightly to facilitate comparison). As you can see, there are widely divergent opinions as to "typical" expenditures, particularly on food and housing. That alone is sufficient warning against taking comparisons against typical budgets too seriously. It's merely an interesting exercise.

There are many important variables. For example, the Lassiters may appear to be at the low end of the scale in expenditures for food and medical care. That's hardly surprising when one considers they are feeding and ministering to the ills of two instead of four or five. Singles tend to spend proportionally more on housing and less on food. The reasons are simple: the price of getting under a roof at any given standard of living is relatively inflexible,

whereas the cost of food is directly related to how many mouths there are to feed. New mortgages are more expensive than old ones. (By some estimates, new mortgages average 33% of household income.) Housing may be 35% higher in Los Angeles or New York than in Terre Haute. And so on.

Despite all of these caveats, you might want to look closely at any budget categories that appear entirely out of line with national averages. There may be a place you can reduce expenditures without severely affecting your life style.

	Lassiters	Money	BLS Net	Porter 70s	Lasser (Commerce)
Rent or mortgage (Porter excludes mortgage principal)	17.9	15.4	30.7	31.4	16.5
Food	(8.9)	(19.4)	25.3	20.1	(18.4)
Meals out	2.2	4.9			4.2
Home consumption	6.7	14.5			13.3
Clothing	4.5	6.5	6.7	7.8	7.4
Household expenses	(15.3)	(13.8)			(13.7)
Utilities	5.6	6.5			6.8
Telephone	3.2				
Furniture, durables	3.2	4.8			2.1
Household maintenance	3.3	2.5			
Other					4.8
Recreation, entertainment, vacations (personal care, education)	9.8*	4.8		11.4	6.3
Grooming		1.2	2.7		1.4
Tuition/daycare		1.4			
Private education					1.5
Transportation	(9.5)	(10.4)	10.7	21.4	14.1
Personal business					5.3
Financial, legal services		4.1			
Medical care	6.3	5.3	6.7	6.4	10.4
Interest	+	2.7			
Life, disability insurance		1.4			
Philanthropy					1.4
Tobacco					.2
Other	(12.8)	8.2	13.3	1.5	1.4
Miscellaneous	11.7				
Publications	1.1				
Alcohol					2.5
Total Expenses	89.6				
Funds for Investments	10.4	5.8			

* Vacation expense averaged over full year.

Included in miscellaneous, since the Lassiters pay cash.

+ Included in mortgage and Volvo payments.

Figure 3-24: The Lassiters' budget (left column) compared with several other "typical" American budgets. The second column is from *Money Guide: Everything You Need To Know About Personal Finance*, by *Money* magazine. The figures, though unattributed, are cited as national averages. The third column is calculated from the Bureau of Labor Statistics' "upper" urban budget, with taxes omitted. The next column is derived from *Sylvia Porter's New Money Book for the 80's*. It is offered as an "average" budget of the mid-1970s. The source is not cited. The final column is based on U.S. Department of Commerce figures in J.K. Lasser's *Smart Money Management*. The numbers have been rearranged to facilitate comparisons. Numbers in parentheses are totals of the succeeding, indented categories.

Setting Goals

There is more work to be done before you set firm financial goals. The Lassiters' (and your) budget for the next six months is only tentative—and probably optimistic. The projection that they will save \$4,899 during that period doesn't take Christmas into account, for example. There's no provision for the refrigerator breaking down (probably \$750, if they have to replace it). The Dasher won't last forever. On the other hand, they don't absolutely *have* to spend \$750 on furniture and \$1,000 on clothes in the next six months. They will learn to adjust their budget to the ebbs and flows of their spending in due time. Meanwhile, they will have to be somewhat flexible.

Even with such uncertainties, sizing up expenditures, income, and taxes will help you determine how realistic your goals are. You're not going to get to Paris in the spring by setting aside \$1.89 a month. And even if you're saving enough for the trip, you might want to take into account that the kids will be going to college in five or six years, or that you're hoping to make a \$20,000 down payment on a house in several years. In short, you should anticipate the inevitable workings of Murphy's Law, luxury purchases, and—definitely—retirement. And, through all that, you'll want to get a little ahead each year.

Rules of Thumb

1. If your gross income is more than \$50,000 and your expenditures are more than 70% of your income, you probably can make some significant cutbacks relatively painlessly.
2. If you're spending more than 30% of your after-tax income in cash, your records are probably inadequate for effective budgeting.
3. Debt payments, excluding a mortgage, should be no more than 20% of after-tax income. Many people will find 15% more comfortable. Advisers recommend limiting debt payments to 10% of net income if you are over 65, if your monthly after-tax income is less than \$2,000, or if you are the family's only wage earner. Debt payments including a mortgage should not exceed 30% to 35% of *gross* income.
4. Pay yourself first. Establishing an emergency fund should be your first priority of financial planning.
5. Your *Home Accountant* budget tells you how much you have left over each month after routine expenses. This figure tells you more than expert guidelines about whether you can afford to assume additional monthly payments. Be cautious, however. Remember that setting aside an adequate amount for savings is the top priority. You may be saddled with new payments for an extended period. Thus, you must determine not only whether a new debt is within the limits of your financial plans for the present, but also for the life of the loan.



4 SETTING UP A CASH MANAGEMENT SYSTEM

Your computer will help you make a budget, but it won't make it work. Your cash management system will probably require at least two, if not several, bank "demand" accounts, from which you may withdraw money without penalty at any time. (Investments are the subject of another chapter.) If you have several accounts with frequent transactions, *The Home Accountant* will make it considerably easier to keep track of what's going on and to stick to your budget. It will also simplify the monthly chore of reconciling your records to the bank's.

Before bank deregulation, choosing checking and savings accounts was simple because there were few options. A family might have had a joint checking account, a 5¼% passbook savings account, and perhaps a separate savings account for special purposes.

The Depository Institutions Deregulation and Monetary Control Act of 1980 changed all that. Now financial institutions offer a bewildering array of accounts suitable for keeping your operating funds and emergency reserve. Money market accounts offer returns that may be twice those of stodgy, old-fashioned passbook accounts. Some checking accounts now bear interest. Individual Retirement Accounts (discussed under retirement and tax planning) became an option in 1982. These are often superior to the old choices, but you must match your accounts to your needs.

If you're married, you and your spouse must cooperate. If you're sharing your life with a Person of the Opposite Sex Sharing Living Quarters (POSLQ), as the Census Bureau bureaucratically puts it, the job may be even tougher. There is hardly anything less romantic than financial decision-making.

In a "traditional" family, the husband generally brings home the paycheck, makes the major financial decisions, and doles out an allowance to the wife for household expenses and "pin money." If the wife works, her income may be regarded as extra and set aside for savings, luxuries, and special purposes. In some cases, his income is "theirs," while hers is "hers."

Such a cash management system has the virtue of simplicity, but the price of that simplicity may seem high to many contemporary families. A majority of women work, and the nation is rife with POSLQs. On average, women still earn only a fraction of what men do, although women who earn more than their mates are no longer a rarity.

The new age, however, hasn't changed the biological imperatives of child-bearing, and for some families this entails financial imperatives as well. Some financial advisers still recommend treating the wife's income as supplemental: families shouldn't rely on it to pay for ordinary living expenses. The concern is that the income will be lost if the woman quits work to raise a

family. However, many women return to work a few weeks after birth, and child-rearing responsibilities may be shared. I know at least one couple in which the husband left work for the first year after the baby was born because the wife's income was higher. His company, which is not particularly known for flexibility, granted a leave of absence and allowed him to work part-time for that year. Times are changing. You must adapt your money management to your own lifestyle. Nobody else's matters.

POSLQs may prefer to keep their accounts more separate. They might, for example, maintain individual checking and savings accounts and pool their resources to cover household expenses. On the other hand, some couples living together share their finances as if they were married. Untangling finances upon separation, if it comes, will be simpler and fairer if you have a good system of cash management.

Married people, especially women, should also consider the likelihood that they will one day live alone. It is a brutal fact of the 1980s that there is one divorce for every two marriages. Eighty-five percent of all married women will be divorced or widowed. Realists should plan their finances with an eye to the possibility that they may yield to these odds. Even in "traditional" one-income families, women should learn to handle their own financial affairs and establish their own credit ratings.

Divorce is distressing enough without settlement complications. A sound budgeting system will help clear up the financial side of the wreckage. Traditionally, divorce laws have been stacked heavily in favor of men. Property was often held in the husband's name, and it remained his after the divorce. Until the mid-1970s, a Louisiana woman did not even have legal control over her own paycheck. But men have been known to get burned, too. Divorce laws are now fairer. Most states now have "equitable distribution" laws. Assets are divided according to each spouse's contribution to the economic partnership and need. A woman's contributions to her husband's business or career may be considered, but women sometimes wind up with less than they would have under the old laws. A woman will usually be considered capable of financial independence even if she has not been an income earner—and, if the woman brings home the larger paycheck, she may have to provide some support to her ex-husband. Eight states have community property laws, which means that assets acquired during marriage are presumed to be jointly owned. They are Arizona, California, Idaho, Louisiana, Nevada, New Mexico, Texas, and Washington.

Once you decide who will control what money, you will be able to select accounts that match your cash management needs.

A joint checking account may be the solution for income poolers. All income goes into the account, and both partners write checks on it. Each month, a budgeted sum should be transferred to savings. A parent-child joint account can help support a child who is off at college. The student can write checks and keep his budget; the parent can deposit the money directly at home.

A joint account tends to have a larger average balance than two separate accounts. You may be able to avoid service charges, or keep adequate funds on hand to meet the requirements of an interest bearing checking account. Moreover, your bookkeeping on *The Home Accountant* will be much simpler, since all of your income, expenditures, and savings will flow through one account.

There are disadvantages, however. Close cooperation is required to avoid overdrawing, and partners may feel they must account for their personal expenditures, since all checks will pass through the mutual account. Even checks for gifts to each other will show up. More serious problems may arise in the event of a soured marriage or a money conflict with an offspring. Either owner of a joint account has legal access to all the money therein, and is free to empty the account at any time. Children and spouses have been known to seize that option in the heat of a dispute.

The death of a co-owner of a joint account can also cause complications. In some states, joint accounts are temporarily frozen when one owner dies. The survivor may be left temporarily short of funds. Estate taxes can be another problem. The IRS, in its uncooperative way, has always wanted to consider the contents of a joint account entirely the property of the first to die unless the survivor could *prove* otherwise. The Economic Recovery Act of 1981 removed this onus from spouses, but joint accounts can still cause trouble in estate settlements for others.

Separate checking accounts solve some of these problems. Each person has control of his or her own money and is responsible for keeping his or her checkbook in balance. In a one-income family, accounting remains relatively simple. The income flows into the salary-earner's account and from there to savings, expenditures, and the spouse's account. Two-income families may find it more difficult to divvy up joint expenses, since there is no account in which each partner can deposit contributions to a household account.

One solution is to set up separate checking and savings accounts, plus a joint account. *The Home Accountant* will keep tabs on as many as five checking accounts. The more accounts you have, however, the more tedious your bookkeeping will become, the more money you'll have to commit to maintaining minimum balances, the higher your service charges are likely to be, and the less money you will have left over for higher yielding investments. None of these are serious drawbacks if you have a substantial income and substantial assets. Still, you may abandon an overly elaborate system of accounts before you even get the bugs out. Like your budget, your cash management system should be simple, efficient, and easy to use.

The Lassiters have separate checking accounts and a joint bank money market account, on which they may write three checks a month. This allows them to pool their savings and to write checks for their largest expenditures—the house and car payments—from an interest-bearing account. They divide up the rest of the mutual expenses and pay them from their separate checking accounts. Careful accounting is required, however, to

keep up with their savings in the money market account, since they also write checks on it for regular expenses.

Once you have settled on a basic system, you will find a dizzying variety of ways to implement it at your local bank. Most banks offer the same basic types of accounts. But there may be important differences in service charges, interest rates, the way interest is calculated, minimum balances, and other factors. It's important to have a long-term relationship with your bank, but the differences in services and charges are large enough to warrant shopping around.

Here is a brief rundown on the basic types of checking and interest-bearing accounts you will find at banks and savings and loans. These accounts are primarily for your emergency fund and your operating budget, although a very cautious investor or a person with less than \$10,000 to invest might choose one of the higher yielding accounts.

Regular Checking

Most people, of course, use checking accounts for most of their routine transactions. The money is instantly available, and there is no minimum balance. A *Home Accountant* budget and relatively new, sophisticated bank services can help make the old-fashioned checking account an efficient cash management tool.

It costs the bank ten to thirty cents to process a check, so the institution is going to get its money one way or another, either by charging fees or requiring a minimum balance in the checking account or in a low-interest savings account. The bank may offer free checking as part of a "preferred customer" package requiring a large savings balance or an even larger amount—say, \$10,000—in certificates of deposit. The package may include a safe deposit box, reduced annual fees and interest for credit cards, slightly lower rates on loans, and free checks. The only way to determine the best deal for you is to shop and compare, and add up the fees and interest associated with the combination of services you need.

You can apply for a cash reserve to cover checks if you inadvertently overdraw. This amounts to an expensive line of credit, probably at the same interest rate as you pay on your credit cards. In addition, the interest begins accumulating when you withdraw money from your cash reserve. You do not pay interest on credit card purchases if you pay your bill at the end of the month. Obviously, a cash reserve is no substitute for accurate recordkeeping, but it will cover overdrafts without putting you through the hassle and embarrassment of a bounced check. And the interest may be less expensive than the ten to fifteen dollar fee the bank charges for a bounced check. (The merchant to whom you write the check may tack on his own fee.) You may be able to apply for a cash reserve and a credit card with the same form.

The computer revolution is changing the way we do our routine banking. Automatic teller machines offer a lot of convenience for a very modest fee (an

annual charge of perhaps five dollars for an automatic teller card). Your card may also give you access to a nationwide network of automatic tellers, allowing you to obtain cash easily in cities where it would be difficult to cash a personal check. A small fee is usually charged for such transactions.

Some cautions are in order. You may be vulnerable to robbery if you withdraw money from a machine in an isolated area at night. The card in your hand is the equivalent of the maximum amount of cash the machine will allow you to withdraw at one time; it's almost as if you were standing on a deserted street corner with a hundred dollar bill in your hand. You must, of course, be careful to enter your transactions in your checkbook. And you should never deposit cash in an automatic teller. If the machine malfunctions, the transaction may be almost impossible to trace. Making deposits by check is generally safe. Memorize your secret code, so you don't have to carry it on you in writing. If you lose your automatic teller card, you should report the loss to your bank immediately, just as you would a credit card. Federal regulations limit your liability to fifty dollars if you report the loss of the card within two business days. Thereafter, your liability becomes substantially larger.

Bank debit cards, issued by the major credit card companies, give you another way to put your purchases on plastic. They are like checks (they debit your account), but they enable you to make purchases out of town or at other places where a check would not be accepted. There is another difference: the marvel of electronics makes it possible to accomplish the transfer of funds instantly, though most merchants don't yet have the equipment to do this. While a credit card delays your payment, a debit card may clear a transaction much more quickly than a check, depriving you of several days' interest. Again, cautions are in order. You must be careful to record transactions in your check register. (A simple solution is to keep your receipts and record your transactions regularly on *The Home Accountant*.) Furthermore, a stolen debit card may be as negotiable as a stolen credit card, and federal regulations on the limits of your liability are less clear than they are for credit cards.

Some 300 banks and savings and loans around the country allow you to authorize automatic payments of bills every month, even by telephone. (If your bank offers this service, *The Home Accountant's* automatic transaction feature dovetails nicely.) The fee for such transactions may be less than the cost of mailing a check. About the only problem with automatic transactions, especially if you record them automatically on *The Home Accountant*, is that you must remember to make sure your account can cover them without falling below whatever minimum the bank sets.

Banking by home computer or through a special cable television channel is on the horizon; however, these services are not yet widely available.

Regular Savings

Your parents probably started you out with a savings account at the bank or savings and loan. Until very recently, S&Ls paid a quarter of a percentage point more interest than banks, but both now offer 5½%. That interest rate is kid's stuff. You might want to set up accounts for the youngsters to get them in the habit of saving, but it's hard to think of a reason for an adult to keep more than \$500 in a regular savings account.

Relatively inactive savings accounts are a terrific deal for financial institutions. Banks and S&Ls are in the business of buying money low and selling it high. Where else can *anybody* obtain money for 5.5%? The institution might turn around and lend the money out at, say, 14.5% for a mortgage. That nine-percentage-point spread is much higher than banks usually get.

Traditionally, institutions have allowed unlimited withdrawals from regular savings accounts. However, small, active accounts are expensive to administer, and now there is usually a service charge for more than an allotted number of withdrawals per month. One typical bank charges a dollar if you make more than two withdrawals each month when your balance falls below \$2,500. Savings accounts are cumbersome if you want to withdraw money often, since you cannot write checks.

In most recent years, 5.5% would not have even kept up with inflation. And interest, of course, is taxable. In the last chapter, the Lassiters figured that their combined state and federal income tax bracket for 1984 would probably be 43%. Their after-tax yield on a savings account would be less than 2.4%. After taking inflation into account, they would have a guaranteed, government-insured loss.

(Some state-chartered institutions in Maryland, North Carolina, Ohio, and Pennsylvania are exempt from federal interest ceilings and offer savings accounts that pay interest in the 7% to 8.5% range. If you live elsewhere, you can make deposits by mail. Lists of institutions are available from state banking agencies. Unless you are unable to meet the minimum balance requirements of a bank money market account there is little reason to go to the trouble.)

There are two reasons a grown-up might want a savings account. These accounts usually require no minimum balance, whereas some higher-interest accounts require minimum balances of \$2,500. (If you don't have \$2,500 in cash on hand, your emergency reserve is probably inadequate.)

The more compelling reason to have a savings account is to avoid fees for other services. Your bank probably offers free checking if you keep a minimum amount in a regular savings account. It's easy to figure out whether the savings in fees will offset the loss of interest. Suppose your bank offers free checking if you keep \$500 in a savings account. If the checking fee is two dollars a month plus twenty-five cents a check and you write an average of twenty checks a month, the potential savings is seven dollars a month, or eighty-four dollars a year. That's nearly a 17% return on your \$500, in addition

to the paltry interest from the savings account. And you don't have to pay taxes on the money you save in fees. If you can find a better deal, take it. Your bank may also offer "deluxe banking" or "preferred customer" service if you keep a much larger amount, such as \$2,500, in your savings account. Again, simply figure out whether the savings on services offset the lost interest.

It makes no sense to leave more than the minimum in your savings account. If you have more than \$500 there, you should probably move it immediately.

NOW Accounts

NOW stands for negotiated order of withdrawal, which doesn't shed much light on how NOW accounts work. They're technically savings accounts, but for all practical purposes, they function as interest-bearing checking accounts.

There is, of course, no free lunch. First, the interest rate is only 5.25%, so it's no place to keep more money than you have to. Further, banks often charge higher service charges for NOW accounts than regular checking accounts. A regular account may be a better deal, unless you need to keep a large balance in a checking account. Many banks, in fact, require hefty minimum balances in NOW accounts. These may be as low as \$500 or as high as \$3,000. Other banks offer a series of either/or options. One typical bank charges no fees on NOW accounts if you have a regular savings balance of \$750, a minimum NOW account balance of \$1,000, or an average NOW balance of \$2,500. If you fail to meet at least one of these criteria any time during the month, the bank charges a four dollar monthly fee and twenty-five cents per check. There's a lot of room for competition here, so shop around.

If, for some reason, you keep a large amount of money in regular checking and savings accounts, a NOW account might be an improvement. But why are you keeping large sums in low-interest- and non-interest-bearing accounts? You should compare the total costs and interest of a NOW account with those of other combinations of accounts, such as a regular checking account and a money market account.

Super NOW Accounts

Super NOW accounts, authorized by Congress in 1983, offer substantially higher interest rates than NOW accounts, but are also subject to larger minimum balances and higher fees. You usually see these accounts referred to as money market checking accounts. Although interest rates are not fixed by law or regulation, they probably will be more than a percentage point lower than the bank's money market account rates. The trade-off is that you can write only three checks a month on a money market account.

The law sets a minimum balance of \$1,000 in super NOW accounts. If your balance falls below that, the law requires that the interest rate drop to 5.25%.

Many banks levy stiffer penalties than required if your balance falls below the minimum. They may, for example, charge five or ten dollars a month to keep the account open. You may also encounter routine service charges. One typical bank charges three dollars per month plus twenty-five cents per check.

Bank Money Market Accounts

Money market *funds* are mutual funds that collect investors' money and purchase Treasury bills, commercial paper, and other secure short-term notes. A money market *account* at your bank is simply a bank account. The bank uses your deposits just as it uses its other assets, for loans and whatever other investments it makes.

These accounts were authorized in 1982 to allow banks and thrift institutions to compete with money market funds. A minimum deposit of \$1,000 is required by law, but the institution may pay whatever interest rate it chooses. Typically, the rate will be slightly lower than the average for money market funds. One week in mid-June 1984, the funds yielded an average of 10.0%, while money market accounts yielded an average of 9.4%, according to *The New York Times*. (You can compare rates each week in the consumer rates chart in the *Times* Sunday business section.) A week earlier, the gap was slightly smaller, at 9.74% for money market funds and 9.36% for accounts. The bank may adjust the interest daily or guarantee it by the month. The rate paid for the month will appear on your statements. If your money market account balance drops below \$1,000, the rate will drop to 5.25%.

Money market accounts offer the highest rates you will find for a demand bank account. (Certificates of deposit pay more, but you incur a penalty if you withdraw your money before they mature.) The fluctuating rates will be to your benefit when interest rates are rising, but to your disadvantage when they are falling.

The primary drawback of a money market account for cash management is its inflexibility. With a maximum of three checks permitted a month, you will have to use it as a savings account, although you can use those three checks for your biggest bills. The Lassiters, for example, make their mortgage and car payments from their money market account. The third could be reserved for large purchases, such as furniture or major appliances. You could also use it to pay a credit card bill. (You may be able to write additional checks for a substantial fee, perhaps five dollars apiece. You may also be permitted to authorize a limited number of automatic, non-check transfers.)

Money market funds usually allow you to write an unlimited number of checks, but may set a minimum check amount, such as \$500. They may also be somewhat less convenient than a bank account. While money market accounts are insured by the FDIC, money market funds are not. The money market funds are so safe, however, that the insurance is a relatively minor consideration.

Overall, money market accounts are an attractive option for people who want to maintain immediate access to relatively large amounts, and are not unduly restricted by the limit of three checks per month.

Certificates of Deposit

Certificates of deposit are another financial instrument you will encounter at your bank or savings and loan. A CD is not so much a cash management tool as a very safe investment with a moderate yield. You commit your funds for an extended period in return for a somewhat higher interest rate. CDs are not an appropriate place to keep your emergency funds or other cash you may need on short notice, since there are penalties for early withdrawal.

The financial market competes for your money, and, despite an occasional aberration, there are only two things that will induce it to pay you a higher return: higher risk, and commitment of funds for a longer period of time. An aversion to either requires you to accept a lower yield. While CDs are virtually risk-free, they reward a longer term of deposit with a higher yield. The fixed rates of CDs are to your advantage if interest rates are falling, but can prove expensive when interest rates are on the rise.

These are the CDs and the money market account rates offered in mid-1984 by a state-chartered North Carolina S&L that was paying higher interest rates than most of its competitors:

Money Market Account: 9.76% annual rate (10.25% annual yield after compounding).

Three-Month CD (\$1,000 minimum): 10.0% annual rate (10.51% yield).

Six-Month CD (\$1,000 minimum): 10.5% annual rate (11.02% yield).

One-Year CD (\$500 minimum): 11% annual rate (11.57% yield).

Three- or Four-Year CD (\$500 minimum): 11.65% annual rate (12.29% yield).

Notice that there is about a two-percentage-point spread between the money market account and the longest-term CD. You get about 20% more interest with the CD. But a two-point spread on \$1,000 is worth only twenty dollars a year, less state and federal income taxes, which could easily reduce the spread to ten dollars. Unless you're making a sizeable deposit (in which case you might want to look at a more creative investment strategy), you're giving up instant access to your money for a pittance. The interest calculation here is relevant primarily to short-term deposits of money to which you want immediate access. Taking into account compounding over an extended period, a two-point spread will make a substantial difference in the value of a long-term investment.

Your money is not totally unavailable. Government regulation of CDs was relaxed substantially in October 1983. (If you bought a CD before that, the old rules still apply. Read the fine print.) The penalty for early withdrawal is now relatively modest: thirty-one days' interest on deposits of less than one year and ninety days' interest for longer-term CDs. If you have not yet

accumulated that much interest, the equivalent will be deducted from your original deposit.

Deregulation also removed interest ceilings and the legal requirements for minimum deposits. Some banks offer interest on a continuous sliding scale. The larger the deposit and the longer the term, the higher the interest. (See Figure 4-1.) Expect minimum deposits of \$1,000, or sometimes \$500 for longer-term CDs. As long-term investments, CDs really compete with T-bills and notes, corporate bonds, and similar instruments rather than with other bank deposits. Interest will be in the same ballpark as Treasury bills and notes. See the chapter on investments.

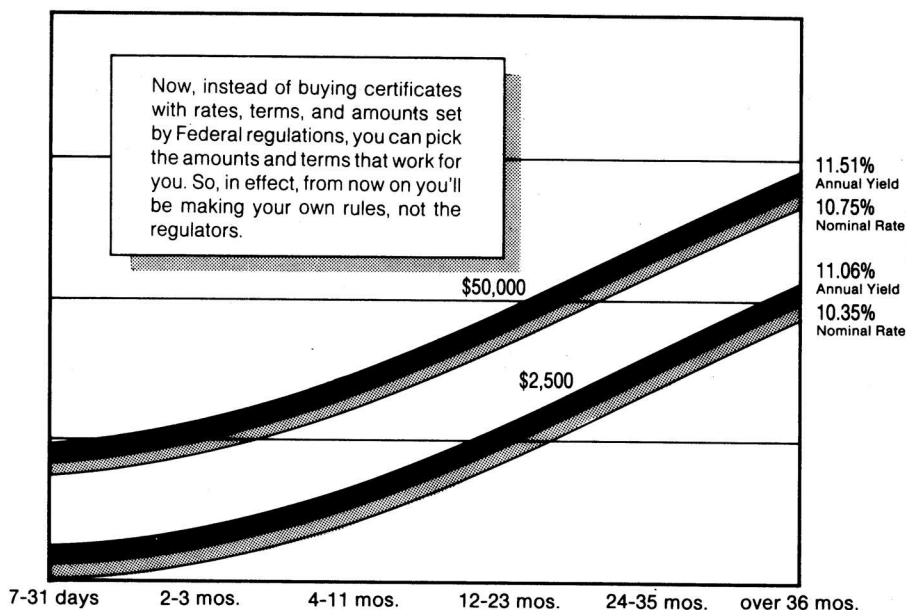


Figure 4-1: Deregulation has given banks and savings and loans a great deal of flexibility in setting the terms of certificates of deposit. Many banks offer sliding scales; the larger the deposit and the longer the term, the higher the interest. This chart shows one bank's scale in mid-1984.

Penalties for early withdrawals limit the usefulness of CDs as a cash management tool. If access is important, you will probably be better off with money market accounts, money market funds, or a relatively new product offered by brokerage houses and some banks: cash management accounts, sometimes referred to as asset management accounts.

Cash Management Accounts

Merrill Lynch Pierce Fenner & Smith began offering its Cash Management Account in 1977, and other brokerage houses and banks have since entered the fray. A cash management account combines a money market fund (or funds) and a brokerage account. It offers free unlimited checking, a variety of credit options, and a monthly statement that will fit nicely with your record-

keeping on *The Home Accountant*. Treat it as a checking account. It's one of the better deals in the financial supermarket if you have the price of admission: at least \$10,000, and often \$20,000 in a combination of cash and/or securities. The annual fee is often fifty dollars or less, but may be more than \$100.

The account is built around a money market fund. You may choose from three options: a diversified fund, a tax-free fund, and a government securities fund. The account also serves as a brokerage account through which all or most of your investments can be handled. If your account is at a bank, your transactions will probably be handled through a discount broker. You will get a 40 to 75% discount on commissions, but you will have to do without a broker's advice. All of the account's activity is reflected in a single monthly statement. Some advisers suggest that a brokerage house account reduces recordkeeping and paperwork more, but that a bank account may be the ticket if you just want to consolidate checking, loan activity, and savings.

If your account is at a brokerage house, your broker will have access to all of your transactions. You may consider this a good thing or a bloody nuisance. The broker may give you a call if he sees money idling away at a low return when better investments are available. On the other hand, you may not want your broker to call every time he sees a chance at a commission. (Never, never forget that your broker is a salesman. He makes his money by making you do business that generates commissions.) Some people consider it an invasion of privacy for a broker to be poring over their checking accounts.

One of the advantages of a cash management account is that interest, dividends, and bond income are automatically swept into the money market fund. Thus, your money is always collecting interest. Some accounts automatically deposit all income in the money market fund immediately; others sweep in large amounts daily (sometimes only sums of more than \$1,000), and the rest on a weekly basis. This may make a difference if your account is very active.

Checking is usually free, with no limit on the number or amount of transactions. Most banks return cancelled checks. Most brokerage houses do not, sending a detailed, itemized statement listing dates, amounts, and to whom checks were written. This is ordinarily not a problem, but it can be a pain if there is an error. At a bank, a "personal banker" may handle such problems. A broker at an investment house will probably send you to a tollfree number. He has commissions to make and doesn't get paid for straightening out the bookkeeping. A few accounts, incidentally, allow you to manage your budget through your monthly statement by assigning checks to budget categories. Others offer statements that are little more than a hodgepodge: a chronological record with all types of transactions mixed in.

Along with your account, you will probably get a debit card, a credit card, and perhaps a travel and entertainment card, such as American Express. They are usually, but not always, free. You will also be able to borrow against your stocks and CDs at attractive rates.

There are niggling complaints about cash management accounts. There may be delays in crediting and debiting (especially crediting deposits, naturally). With all of this wheeling and dealing going on at once, you may find it more difficult to keep track of how much you're spending, how much you're actually saving, and how much credit you're using than if you handled these affairs separately. In the event of problems, it can be more difficult, and aggravating, to straighten them out long-distance via a brokerage house's 800 number. And, with all of your financial affairs scattered hither and yon from one account, it can take a while to close it out if you decide you want to put your money elsewhere.

Overall, however, cash management accounts are worth a look, if you've got the ante.

Safety

All of the types of accounts listed above are so safe that fear of losing your money is not an important consideration.

The federal government insures deposits in banks and S&Ls for up to \$100,000. The insurance applies only to loss of funds due to the closing of the institution, not to any other risks. The Federal Deposit Insurance Corporation insures bank accounts; the Federal Savings and Loan Insurance Corporation does the same for thrift institutions. The \$100,000 limit applies to the total deposits by each depositor in each institution. If you have more than \$100,000 in several deposits in a single bank, part of your savings is uninsured, and you might consider moving some of your funds to another institution. However, a couple with accounts in each spouse's name, plus a joint account, is considered three separate depositors, each eligible for \$100,000.

The most likely way to lose your money in a bank or S&L account, by the way, is to leave an account dormant for several years. Laws vary from state to state, but inactive accounts may be turned over to the state treasury after a couple of years. An occasional deposit or withdrawal, or a periodic letter informing the institution you're still around is all that's required to keep the account active.

Accounts in state-chartered institutions, which exist in only a few states, are insured privately or through a state agency. Statistically, these accounts may be slightly more risky, but it's nothing to worry about.

Money market funds and cash management accounts are not insured. If you buy stocks or other investments through your cash management account, you naturally assume the risk that comes with the investment. In themselves, however, money market funds and cash management accounts built on them are very nearly riskfree. These funds invest in "commercial paper," loaning money to major corporations and banks. They also buy government notes and bonds of the United States and other countries. These funds are so thoroughly diversified that even a default by one of these borrowers would

have little effect on the value of your investment. Billions and billions, as Carl Sagan would put it, has been invested in money market accounts, and no one has ever lost any money. Not what you would call race track odds.

Putting It All Together

The accounts where you keep your operating funds and your emergency reserve are no place for taking speculative fliers. The idea is to be prepared for emergencies, not to create them. There are a variety of rock-solid types of accounts for these purposes. In choosing among them, you weigh convenience, liquidity, and ease of use against marginally higher interest rates. Chances are that your choices will not be very exotic. A regular checking account backed up with a money market account or fund (and perhaps a regular savings account, if it saves you enough in service charges to justify accepting the low interest rate) will probably fit the bill. Higher rollers might drift toward a cash management account.

The cash flowing through several accounts is much easier to manage with *The Home Accountant* than it is on paper. You can assign income, interest, and expenditures to any category from any checking account, and the computer will automatically keep a running tab on each. Compare this with the paper-and-pencil method of toting up frequent expenditures for, say, food, when you are writing checks on several accounts.

The Home Accountant will keep track of up to five checking accounts. You should treat any account in which there is frequent activity as a checking account, even if it is technically a savings account, a money market account, a money market fund, or a cash management account. You can enter transactions on *The Home Accountant* only through checking accounts, their associated cash accounts, and credit card accounts. (The latter cannot be used for bank accounts, because they are liability accounts. They work backwards from checking accounts, which are assets. Writing a check decreases your asset, whereas making a credit card purchase increases your liability.) If you decide to open a new account after reviewing your budget and options, you can enter it at the beginning of any month through *The Home Accountant's* budget module.

The Home Accountant also will simplify the monthly drudgery of reconciling your records and the bank's. The Reconcile Bank feature allows you to mark each check as cleared as you compare your cancelled checks and check register to your statement. The program gives your balance after all cleared checks and deposits are entered. It will also show you what transactions are outstanding. The feature is simple to use. Consult your manual for instructions.

When you have set up a Home Accountant budget and a system of accounts through which you can implement it, it is time to think about long-range financial planning and tax planning, the subjects of the next two chapters.

Rules of Thumb and General Advice

- 1) Do not keep more money in a regular checking account than is necessary to avoid service charges and cover your checks. Before opening an interest-bearing checking account, however, make certain the interest will be more than the service charges.
- 2) Do not keep more in a regular savings account than the minimum required to avoid service charges in other accounts. You can get more than 5.5 % interest almost anywhere.
- 3) Bank money market accounts are probably more convenient than money market funds for most people. Some money market funds require minimum balances of only \$1,000. For those who can ante up the \$10,000 to \$20,000 opening balance, a cash management account at a bank or brokerage house is worth a look.
- 4) NOW accounts, which pay passbook savings rates, may appeal to people who keep an average of more than \$2,000 in their checking accounts. But *why* would you keep an average of more than \$2,000 in a non-interest-bearing account? Before you open a NOW account, consider a money market account (against which you can write your three largest checks each month) and a checking account. A cash management account might also fill the bill.
- 5) You can probably do better than a super NOW Account. A super NOW might make sense for someone who needs immediate access to more than \$5,000 and writes a lot of checks, but examine the alternatives before you open a super NOW.
- 6) Certificates of deposit are very safe and allow you to fix an interest rate for an extended period. This is a good move if you think interest rates will drop—and you turn out to be right. If interest rates are rising, you may come out better with a money market account.
- 7) Federal deregulation has taken the shackles off financial institutions, and they are competing for your money. Shop around.



5 SETTING GOALS

You won't get to Paris in the spring by saving \$1.89 a month. But you can buy a \$1 million yacht in only eighty-eight years if you invest that amount at 10% compound interest. (After taxes and inflation, of course. You might beat the taxes, but it's tough to earn 10% after inflation consistently. That \$1 million sailboat might turn out to be a Sunfish.)

The reward for budgeting is the opportunity to set realistic financial goals. Some of your financial goals will go along with the dieting aspect of budgeting. You'll have to set aside money for the kids' college education and your own retirement. That part is like liver and brussels sprouts. Good for you, but not a lot of fun. But setting goals is also how you'll figure out how to buy that BMW, your first house, or your own yacht to sail to Cozumel for a scuba diving trip ten years from now. Whatever.

This chapter is basically about having your cake and eating your brussels sprouts, too.

The *Home Accountant* budget you drew up in Chapter 3 will tell you whether you're living within your means. Few of us can devote large amounts of our financial resources to several goals at a time. But if, like the Lassiters, you are saving more than 10% of your after-tax income, you have the tasty choice of either immediate gratification or investing to reach longer-term spending goals, whether they be meeting responsibilities, like saving for the children's education, or indulging yourself, like visiting Paris in the spring. If your *Home Accountant* budget brings bad news, you may be trying to figure out how to pay for what you've already bought; your overriding short-term financial goal may be to reduce spending and indebtedness.

Once you begin working toward specific goals, relatively small monthly savings, invested at compound interest, will yield surprising amounts of cash. *The Home Accountant Plus*, the IBM version of the program, includes a forecasting module. It can quickly calculate the monthly payments required to meet a certain goal over varying periods at any rate of interest, can compute compound interest on lump-sum investments, and can tell you how much you have to earn in a future year to maintain your current budget, given any rate of inflation. If you don't have one of these versions of the program, the charts in this chapter will fill the gap. They'll also show you how much you will earn over time at various interest rates, if you set aside a certain amount each year. You can calculate all of these figures fairly simply on a \$40 business calculator, provided you don't want to figure too many variations. You can also figure them on a regular \$12 calculator, if it has parentheses and exponents and you have patience. However you arrive at your forecasts, you can

determine whether your goals are realistic and exactly what you must do to reach them.

Like your earning power, your spending patterns and financial goals are likely to shift as you grow older and your children grow up and become financially independent. Expenditures start low as you leave home, accelerate during early marriage as you establish a home, perhaps drop briefly, then accelerate from the birth of children through their college years. If you have children by the time you are thirty, they will be on their own when you are in your early fifties, when your income may be still approaching its peak. Your spending needs may peak eight to twelve years ahead of your earnings. And about the time you are freed financially from child rearing, it will be time to begin planning seriously for retirement.

In the first years after college and the early years of marriage, you may actually have more discretionary income than you will have later on, especially if both spouses work. Establishing a career, and perhaps additional education toward that end, are the top priority. Once you have established an emergency fund and set up a household, you may have the opportunity to set aside money for investment. Buying a house or condominium still makes sense as an investment, even though the real estate market isn't as robust as it was in the 1970s. And, because you're young and have relatively few responsibilities, you may seek growth-oriented, riskier investments than you would later. Life insurance drummers work lists of college graduates, but now is not the time to buy unless someone is financially dependent on you.

The Lassiters are now in the latter portion of this stage. Despite trips to Cozumel and a comfortable lifestyle, they live well within their means. They have accumulated substantial assets, and still they have a significant amount of money left over for investment. If they were to have children, however, their financial situation would change dramatically, especially if Susan (or Tom) stayed home with the youngsters. Even if both continued to work, they would have to pay for daycare, increased medical insurance, life insurance, and the daily needs of the kids. They might want to move to a larger house, and it wouldn't be too soon to start thinking about paying for college. Their now comfortable margin might quickly be consumed. If their income continued to rise, tax planning would take on increased importance. Still, they would need to plan for new cars, vacations, and whatnot.

Once the kids are on their own, you're back on your own, too. You may have achieved financial independence and no longer need life insurance. Your investment strategy will shift toward retirement, and, since there will be less time to recover, your aversion to risk may increase. If you plan well, money management during retirement will not be a trial. Your taxes will probably drop, and your life insurance needs should disappear. But there's really no way to squeeze a \$60,000 lifestyle into a \$30,000 budget. You've got to eat your brussels sprouts along the way.

Whether you're saving for retirement or to put down \$10,000 on a BMW, the procedure is the same. There are two ways you can determine what you must

do to achieve the goal. If you know how much you can save and the interest rate you can earn on your savings, you can figure how long it will take you to reach the goal; increasing your savings will accelerate your progress. Or, you can set a goal and a date by which you want to achieve it. Then, you will calculate the monthly (or annual) deposits required to meet the goal with compound interest working for you.

Fun With Inflation and Compound Interest

The effects of compound interest are remarkable. How much do you think you would have to save each year to have \$50,000 when you retire in forty years? If you were keeping your cache in a coffee can under the bed, you would have to contribute \$1,250 every year to reach your goal. But, at 10% interest, compounded, a single deposit of \$1,000 would generate \$53,700 in the same period. If you held out for 100 years, your heirs would inherit more than \$21 million from that single deposit; in the second 100 years, your estate would grow to nearly \$450 billion. Yes, *billion*. The first hundred years are the hardest.

The frequency with which interest is compounded, incidentally, can make a significant difference over a long period of time, although it is less important for shorter periods. The more frequently interest is compounded, the faster your savings grow. Figure 5-1 compares annual, monthly, and daily compounding for a lump-sum deposit of \$1,000 at 10% interest and for a fund into which \$100 is deposited each month. (In *The Home Accountant Plus*, the IBM version of the program, the Value of Future Investment function compounds monthly, while the Monthly Amount for Future Goal compounds annually. In this chapter, we will generally follow that convention for the sake of consistency. Strictly speaking, we may sometimes be comparing apples and oranges, but the difference is too small to make much difference, given the overall uncertainty of financial forecasting.)

Year	\$1000 Compounded				\$100 Per Month Compounded		
	Yearly	Monthly	Daily		Yearly	Monthly	Daily
1	1,100	1,105	1,105	|	1,200	1,257	1,262
5	1,611	1,645	1,649	|	7,326	7,744	7,783
10	2,594	2,707	2,718	|	19,125	20,484	20,615
20	6,727	7,328	7,387	|	68,730	75,937	76,644
30	17,449	19,837	20,077	|	197,393	226,049	228,927
40	45,259	53,701	54,568	|	531,111	632,408	642,819
50	117,391	145,370	148,312	|	1,396,690	1,732,439	1,767,739

Figure 5-1: 10% interest compounded yearly, monthly, and daily. The frequency of compounding makes relatively little difference over short periods, but, if you're saving \$100 a month, the difference between annual and daily compounding comes to nearly \$400,000 in fifty years.

Unfortunately, inflation works exactly the same way as compound interest. If inflation averages 10% for 100 years and your \$1,000 grows to \$21 million at 10% interest, you will wind up exactly where you started—with the buying

power of \$1,000. In fact, if you're in the 40% tax bracket, you'll be left with only \$600. Your original \$1,000 will not have been taxed, but it will be worth considerably less than a penny.

PURCHASING POWER OF THE DOLLAR: 1940 TO 1983

[1967=\$1.00. Producer prices prior to 1961, and consumer prices prior to 1964, exclude Alaska and Hawaii. For 1940 and 1945, producer prices based on all commodities index; subsequent years based on finished goods index. Obtained by dividing the average price index for the 1967 base period (100.0) by the price index for a given period and expressing the result in dollars and cents. Annual figures are based on average of monthly data.]

YEAR	ANNUAL AVERAGE AS MEASURED BY—		YEAR	ANNUAL AVERAGE AS MEASURED BY—		YEAR	ANNUAL AVERAGE AS MEASURED BY—	
	Producer prices	Consumer prices		Producer prices	Consumer prices		Producer prices	Consumer prices
1940	\$2.469	\$2.381	1958	\$1.073	\$1.155	1970	\$.907	\$.860
1945	1.832	1.855	1958	1.075	1.145	1971 .....	.880	.824
1948	1.252	1.387	1960	1.067	1.127	1972 .....	.853	.799
1949	1.289	1.401	1961	1.067	1.116	1973 .....	.782	.752
1950	1.266	1.387	1962	1.064	1.104	1974 .....	.678	.678
1951	1.156	1.285	1963	1.067	1.091	1975 .....	.612	.678
1952	1.163	1.258	1964	1.063	1.076	1976 .....	.586	.587
1953	1.175	1.248	1965	1.045	1.058	1977 .....	.550	.551
1954	1.172	1.242	1966	1.012	1.029	1978 .....	.510	.512
1955	1.170	1.247	1967	1.000	1.000	1979 .....	.459	.461
1956	1.138	1.229	1968 .....	.972	.960	1980 .....	.405	.406
1957	1.098	1.186	1969 .....	.938	.911	1981 .....	.371	.367
						1982 .....	.356	.346
						1983, May ....	.352	.337

Source: U.S. Bureau of Labor Statistics. Monthly data in U.S. Bureau of Economic Analysis, *Survey of Current Business*

Figure 5-2: The declining dollar. Unfortunately, compounding inflation works exactly the same way as compounding interest. If you put \$2.38 in a coffee can under your bed in 1940, it would now be worth less than 34 cents were four and a half decades ago.

This may seem extreme, but Figure 5-2 shows the real decline in the purchasing power of the dollar from 1940 to May 1983. If you put \$2.38 in the coffee can in 1940, it's purchasing power would have declined to that of 34 cents in 1940. Turned around, it now takes \$1 buy what 14 cents would buy in 1940, or what 34 cents would buy in 1967, the base year for the Consumer Price Index.

You simply must take inflation into account in your financial planning. Many retired people struggling to get by on fixed incomes have learned too late, the hard way.

Planning for inflation is easy to understand in principle, but difficult in practice. Take a look at Figure 5-3. The upper line of the graph shows the amount you will accumulate if you save \$100 a month at 10% interest, compounded annually. The lower line shows the value of your hoard in today's dollars. The lower line is almost straight. You will have deposited \$48,000 to build a fund worth \$51,613. Of course, the \$100 you deposit in the 480th month will be worth only \$9.75 in today's dollars, so you haven't done so badly after all. You have, however, started out with a modest but reasonable adult savings program and wind up saving the equivalent of a youngster's allowance.

Confusing? Well, yes, it is. It's fun to fool around with the thousands of dollars compound interest will throw off your investments, but the stuff is ornery to work with in close. There are four variables at work here, two for

you and two against you. Interest is building your fund; inflation is eroding it's value. Your monthly payments add to the kitty; inflation makes the value of each month's deposit smaller than the one before. To make matters worse, the whole mess is compounded.

Fortunately, sensible planning doesn't require you to figure all this out, although you should be aware that it's going on. You don't have to decide now how much to deposit in your fund ten years from now. The chances are negligible of accurately predicting inflation and interest for forty years, anyway.

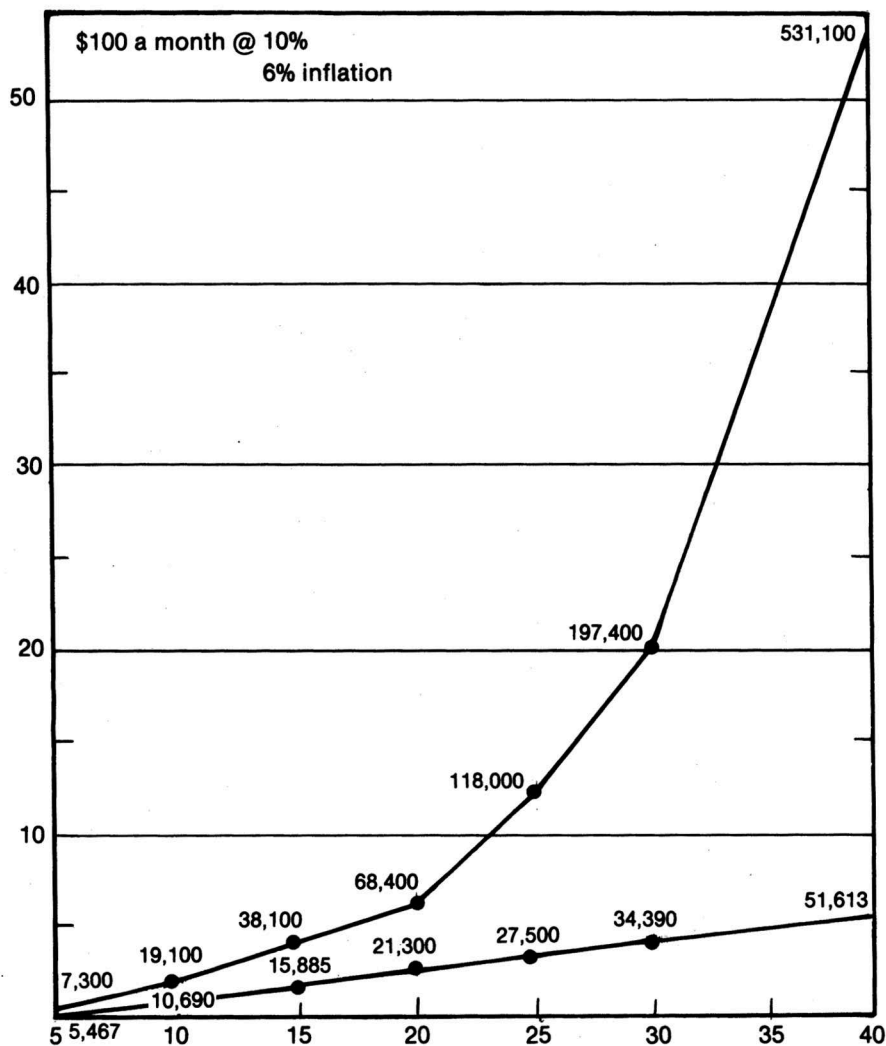


Figure 5-3: The dramatic effects of compound interest are partly illusory. If you deposit \$100 a month at 10% interest, you will accumulate more than half a million dollars in forty years. If inflation is a steady 6%, however, your horde will be worth only one-tenth that amount in today's dollars, barely more than the number of dollars you deposited. Of course, your last monthly deposit will be worth less than \$10, so compound interest is working for you, after, all.

What you must do is recalibrate every year. If you stay ahead of inflation, annually adjust your goal and your monthly savings for inflation, and make proportional progress toward your goal every year, you will arrive on time. There are a couple of ways to go about this. The forecasting module of *The Home Accountant Plus* (the IBM version) will do many of the following calculations for you. (More about that shortly.) You can also make the calculations from the charts in this chapter.

At this point, it may be useful to introduce the Rule of 72: to determine how long it will take to double your money with a lump-sum deposit, divide the interest rate into 72. At 10% interest, for example, your money will double in 7.2 years. At 6% it will take twelve years. And so on. The Rule of 72 works the same way for inflation. If you think inflation will be 6% per year and you want to save \$100,000 in today's dollars, you'll need \$200,000 if it takes twelve years to reach your goal. I don't know why this works, but it's a lot easier than making a more detailed calculation. Since projections are based on estimates (speculations, really), all of these calculations are necessarily rough, anyway.

The examples in this chapter are based on 10% interest rates and 5% or 6% inflation. Ten percent is about what money market funds and money market accounts are paying at this writing, and it's a nice round number, easy to work with. As of mid-1984, inflation is running between 3% and 5%, but the expectations are that interest rates will increase.

It's a good idea to be cautious in making projections. As Andrew Tobias points out in *The Only Investment Guide You'll Ever Need*, real interest rates historically have usually been 2% to 4% after inflation. You might, for example, assume a real interest rate in that range if you were going to invest a lump sum for the children's education. Suppose you planned to put aside \$10,000 and let it sit until it was worth \$20,000 in today's dollars. Using the Rule of 72, it would be easy to figure out how long it would take to reach your goal. At 4% real interest, the answer is about eighteen years. Heaven knows how many dollars you would have in eighteen years, but they would be worth about \$20,000 in today's dollars. At 2% real interest, well, you might have a college fund in time to pay for your grandchild's education. It would take thirty-six years for your investment to double in value.

For long-term goals, then, you should plan conservatively, especially for critical goals such as an adequate retirement income. For shorter periods, interest rates may be higher than 2% to 4% above the inflation rate, as they have in recent years. For the short term, it may be better to base your forecasts on actual interest and inflation rates.

The accompanying charts will assist you in setting your financial goals. We'll refer to them as we go along.

- Figure 5-4 shows the return on a \$1 deposit at various rates of interest, compounded monthly. Just multiply by the amount of your investment. You can also use the table to figure the effect of inflation. Multiply to find the amount you'll need in the future to match the spending power of

today's dollars. Divide to find the value of a future amount in current dollars. Compounding is monthly.

- Figure 5-5 shows the amounts you must save each month to accumulate \$10,000 at various interest rates and time periods. Compounding is annual.

Future Value of \$1 Invested at Various Interest Rates

Interest	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.08	1.09	1.10	1.12	1.13	1.14	1.15	1.16
2	1.02	1.04	1.06	1.08	1.10	1.13	1.15	1.17	1.20	1.22	1.25	1.27	1.29	1.32	1.35
3	1.03	1.06	1.09	1.13	1.16	1.20	1.23	1.27	1.31	1.35	1.39	1.43	1.47	1.52	1.56
4	1.04	1.08	1.13	1.17	1.22	1.27	1.32	1.38	1.43	1.49	1.55	1.61	1.68	1.75	1.81
5	1.05	1.10	1.16	1.22	1.28	1.35	1.42	1.49	1.57	1.65	1.73	1.82	1.91	2.01	2.11
6	1.06	1.13	1.20	1.27	1.35	1.43	1.52	1.61	1.71	1.82	1.93	2.05	2.17	2.31	2.45
7	1.07	1.15	1.23	1.32	1.42	1.52	1.63	1.75	1.87	2.01	2.15	2.31	2.47	2.65	2.84
8	1.08	1.17	1.27	1.38	1.49	1.61	1.75	1.89	2.05	2.22	2.40	2.60	2.81	3.04	3.30
9	1.09	1.20	1.31	1.43	1.57	1.71	1.87	2.05	2.24	2.45	2.68	2.93	3.20	3.50	3.83
10	1.10	1.22	1.35	1.49	1.65	1.82	2.01	2.22	2.45	2.71	2.99	3.30	3.64	4.02	4.44
11	1.12	1.25	1.39	1.55	1.73	1.93	2.15	2.40	2.68	2.99	3.33	3.72	4.15	4.62	5.15
12	1.13	1.27	1.43	1.61	1.82	2.05	2.31	2.60	2.93	3.30	3.72	4.19	4.72	5.31	5.98
13	1.14	1.30	1.48	1.68	1.91	2.18	2.48	2.82	3.21	3.65	4.15	4.72	5.37	6.11	6.94
14	1.15	1.32	1.52	1.75	2.01	2.31	2.66	3.05	3.51	4.03	4.63	5.32	6.11	7.02	8.06
15	1.16	1.35	1.57	1.82	2.11	2.45	2.85	3.31	3.84	4.45	5.17	6.00	6.96	8.07	9.36
20	1.22	1.49	1.82	2.22	2.71	3.31	4.04	4.93	6.01	7.33	8.94	10.89	13.28	16.18	19.72
25	1.28	1.65	2.12	2.71	3.48	4.46	5.73	7.34	9.41	12.06	15.45	19.79	25.34	32.45	41.55
30	1.35	1.82	2.46	3.31	4.47	6.02	8.12	10.94	14.73	19.84	26.71	35.95	48.38	65.08	87.54
35	1.42	2.01	2.85	4.05	5.74	8.12	11.51	16.29	23.06	32.64	46.18	65.31	92.35	130.53	184.47
40	1.49	2.22	3.32	4.94	7.36	10.96	16.31	24.27	36.11	53.70	79.83	118.65	176.28	261.80	388.72

Figure 5-4: Future value of \$1 at various interest rates, compounded monthly. Multiply your investment by the figures in the charts. Divide to determine the value of a future amount in today's dollars. Compounding is monthly.

Years	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	15%
2	413	411	408	407	405	403	401	399	397	393	388
3	272	270	267	264	262	259	257	254	252	247	240
4	202	199	196	193	190	188	185	182	180	174	167
5	160	157	154	151	148	145	142	139	136	131	124
6	132	129	126	123	119	116	114	111	108	103	95
7	112	109	106	102	99	96	93	91	88	83	75
8	97	94	90	87	84	81	78	76	73	68	61
9	85	82	79	76	73	70	67	64	61	56	50
10	76	73	69	66	63	60	58	55	52	47	41

Figure 5-5: Monthly savings required to accumulate \$10,000 over various periods at different rates of interest. Historically, interest has ranged only 2% to 4%, after inflation. Caution is thus advisable in projecting real returns on investment. Compounding is annual.

Monthly Savings To Yield \$100,000 (Multiply by 10 for \$1 Million)

Years	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	15%
5	1,601	1,570	1,539	1,508	1,478	1,449	1,420	1,392	1,365	1,312	1,236
10	761	727	694	663	632	603	575	549	523	475	410
15	482	448	416	386	358	332	307	284	262	224	175
20	343	310	280	252	227	203	182	163	145	116	81
25	260	229	200	175	152	132	114	98	85	62	39
30	205	175	149	125	105	88	74	61	51	35	19
35	167	138	113	92	75	60	48	39	31	19	9
40	138	111	88	69	54	42	32	25	19	11	5
45	116	90	69	52	39	29	22	16	12	6	2
50	99	74	55	40	29	20	15	10	7	3	1

Figure 5-6: Monthly savings required to accumulate \$100,000 over longer periods. Multiply or divide to obtain savings required for other amounts. Compounding is annual.

- Figure 5-6 shows how much you must save each month to accumulate \$100,000 over longer periods. Compounding is annual.
- Figure 5-7 shows how much you will have if you save \$1 a month at various yields and periods. Compounding is annual.
- Figure 5-8 shows the monthly payment for a loan of \$1,000 at various interest rates and periods. The chart will give the the monthly principal and interest payment for anything from a car loan to a mortgage. Just multiply by the number of thousands you plan to borrow. Note in the case of mortgages that you will probably also have to make payments to an escrow account to cover taxes and insurance. These payments will be in addition to the amount shown on the chart. Compounding is monthly.
- Figure 5-9 shows the amount you can withdraw from a retirement account for various periods before exhausting it. Compounding is annual.
- Figure 5-10 is the accumulation of \$2,000 per year deposited in an IRA. Compounding is annual.

Growth of \$1 deposited each month, compounded annually

	2%	3%	4%	5%	6%	8%	10%	12%	15%
1	12	12	12	12	12	12	12	12	12
2	24	24	24	25	25	25	25	25	26
3	37	37	37	38	38	39	40	40	42
4	49	50	51	52	52	54	56	57	60
5	62	64	65	66	68	70	73	76	81
10	131	138	144	151	153	174	191	211	244
15	208	223	240	259	279	326	381	447	571
20	292	322	357	397	441	549	687	865	1,229
25	384	438	500	573	658	877	1,180	1,600	2,554
30	487	571	673	797	949	1,359	1,974	2,896	5,217
40	725	905	1,140	1,450	1,857	3,109	5,311	9,205	21,349
50	1,015	1,354	1,832	2,512	3,484	6,885	13,967	28,800	66,613

Figure 5-7: Future value of \$1 deposited each month at various interest rates. Multiply by your monthly savings. Compounding is annual.

LOAN CALCULATOR

Years	Interest (APR)								
	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00
	(10.47)	(11.57)	(12.68)	(13.80)	(14.93)	(16.08)	(17.23)	(18.39)	(19.56)
1	87.92	88.38	88.85	89.32	89.79	90.26	90.73	91.20	91.68
2	46.14	46.61	47.07	47.54	48.01	48.49	48.96	49.44	49.92
3	32.27	32.74	33.21	33.69	34.18	34.67	35.16	35.65	36.15
4	25.36	25.85	26.33	26.83	27.33	27.83	28.34	28.86	29.37
5	21.25	21.74	22.24	22.75	23.27	23.79	24.32	24.85	25.39
10	13.22	13.78	14.35	14.93	15.53	16.13	16.75	17.38	18.02
15	10.75	11.37	12.00	12.65	13.32	14.00	14.69	15.39	16.10
25	9.09	9.80	10.53	11.28	12.04	12.81	13.59	14.38	15.17
30	8.78	9.52	10.29	11.06	11.85	12.64	13.45	14.26	15.07

Figure 5-8: Monthly payments (principal and interest) on loans of \$1,000. Multiply the payments by the number of thousands you plan to borrow. Most mortgages require monthly escrow payments to cover taxes and insurance. These are in addition to these amounts.

Annual Withdrawals From \$100,000 Retirement Account

Years Interest	5	10	15	20	25	30
1%	20,512	10,512	7,182	5,519	4,522	3,860
2%	21,033	11,042	7,722	6,071	5,086	4,435
3%	21,562	11,587	8,287	6,655	5,691	5,059
4%	22,100	12,149	8,876	7,272	6,334	5,729
5%	22,645	12,728	9,490	7,919	7,015	6,442
6%	23,199	13,322	10,126	8,597	7,732	7,195
7%	23,761	13,933	10,786	9,304	8,481	7,984
8%	24,332	14,559	11,468	10,037	9,262	8,805
9%	24,910	15,201	12,171	10,797	10,070	9,655
10%	25,496	15,858	12,895	11,580	10,904	10,531
11%	26,091	16,530	13,639	12,386	11,761	11,428
12%	26,693	17,217	14,402	13,213	12,639	12,343
15%	28,548	19,360	16,795	15,801	15,370	15,173

Figure 5-9: How long will your retirement fund last? This chart shows how much you can withdraw each year from an account with a beginning balance of \$100,000. The chart assumes monthly withdrawals and compounding of interest. The calculation, incidentally, is exactly the same as the one for the payments on a loan, except, in this case, you're in effect lending money to the bank rather than the other way around.

Growth of \$2,000 per year deposited in an IRA, compounded annually

	2%	3%	4%	5%	6%	8%	10%	12%	15%
5	10,408	10,618	10,833	11,051	11,274	11,733	12,210	12,706	13,485
10	21,899	22,928	24,012	25,156	26,362	28,973	31,875	35,097	40,607
15	34,587	37,198	40,047	43,157	46,552	54,304	63,545	74,559	95,161
20	48,595	53,741	59,556	66,132	73,571	91,524	114,550	144,105	204,887
25	64,061	72,919	83,292	95,454	109,729	146,212	196,694	266,668	425,586
30	81,136	95,151	112,170	132,878	158,116	226,566	328,988	482,665	869,490
40	120,804	150,803	190,051	241,600	309,524	518,113	885,185	1,534,183	3,558,181
50	169,159	225,594	305,334	418,696	580,672	1,147,540	2,327,817	4,800,036	14,435,433

Figure 5-10: The only million-dollar scheme in this book. For most couples, depositing \$2,000 apiece in Individual Retirement Accounts every year is probably the best shot at entering retirement with \$1 million in the bank. It takes time for compound interest to work its magic, so it's important to start early. It's a great tax break, too.

These charts allow you to figure out how quickly your savings will accumulate and to determine whether your goals are feasible. You can multiply or divide the numbers in these tables to make calculations involving other amounts. To see how much you must save to accumulate \$1 million, for example, you would multiply the numbers in Figure 5-6 by 10. To figure your savings if you set aside \$200 a month, multiply the numbers in Figure 5-7 by 200. And so on.

You have several options for accounting for inflation. The one you choose will depend on your investment strategy. Do you want to make payments that are of equal size in dollars? They will be easier to make as time goes on, and you will be able to devote your resources to other goals. Do you want them to increase as your earning power increases? Do you want them to be equal in terms of real dollars?

One method is to inflate your goal by whatever inflation rate you think is likely, then to figure even monthly payments to reach it. The advantage of this method, if you can afford the initial savings, is that the monthly payments will become easier and easier to make, as the dollar shrivels through inflation. (In the example given in Figure 5-3, remember, the value of a \$100 monthly payment falls to only \$9.75 in forty years.) If your income outpaces

inflation—or even keeps up with it—you will be able to set more ambitious goals or to divert dollars to other purposes. You should recalculate each year to keep your inflation and interest projections up to date.

A second method is to add a year's inflation to your goal when you recalculate each year and to adjust your savings accordingly. For example, if inflation is currently 6% and your goal is \$100,000 in current dollars, you would set your first year's savings as if you were trying to reach \$106,000 and increase both your goal and your savings each year. We'll look at how to do this in the section on retirement planning.

This method will allow you to set higher goals than the first, but it's a bit of a gamble, something like a mortgage with graduated payments and adjustable interest. The value of your monthly payments, adjusted for inflation, will remain more or less constant. If your income does not keep pace with inflation, you may have difficulty keeping up with the savings required to reach your goal. And, unless your income grows more rapidly than inflation, you may not be able to save toward other goals.

Suppose, for example, you want to accumulate \$100,000, in today's dollars, in twenty years. Assume you'll be able to earn 10% interest and inflation will be 6% per year. From the table in Figure 5-4, you find that you will need \$3.31 in twenty years to match the current value of \$1. Your goal, then, is \$331,000. (You might also want to take taxes into account. If, for example, you're in the 40% bracket, your after-tax return will be 6%, exactly matching inflation.) Figure 5-6 tells you you must save \$145 a month at 10% interest to build a fund of \$100,000 in twenty years. You must multiply by 3.31 to reach your goal, after inflation. The final calculation: $3.31 \times \$145 = \479.95 . Make it \$480. Obviously, the last payment you make to your fund will be worth only \$145 in today's dollars ($\$479.95 / 3.31 = \145), the same amount you would have to save if it were not for inflation. But you would have started out saving much more.

You might want to even out the payments in real terms. Figures 5-11 and 5-12 show two ways to do it. (We have switched to annual compounding of inflation to make Figure 5-12 come out right. The goal becomes \$320,714, about 3% less than it comes to with monthly compounding. If you think you can predict inflation that accurately, apply for a job at Harvard Business School.)

In Figure 5-11, you start out saving to accumulate \$106,000 (to allow for the first year's inflation) at 10% interest for twenty years. The next year, you add 6% for inflation and recalculate to allow for the interest on the fund you've begun and for the shorter time period. (By the last few years, the fund is generating interest so rapidly it overwhelms the annual recalculations.) Payments start out at \$154 in today's dollars—6% more than if you were setting out to save \$100,000. The highest is about \$575 in today's dollars. This strategy might match a rapidly growing income.

Figure 5-12 is based on after-inflation interest of 3.77% which is what you get if inflation is 6% and the return on your investment is 10%. The payments

are increased by 6% each year, to match inflation. Thus, each payment is worth exactly the same in today's dollars. Unfortunately, this schedule is tough to recalculate if inflation and interest shift midcourse, as of course they will. Toss out last year's schedule and make a new one, taking into account the interest on the amount you've already set aside.

Year	Monthly Payment	Balance In Fund	\$100,000 Inflated at 6%
1	154	1,851	106,000
2	180	4,192	112,360
3	209	7,122	119,102
4	243	10,755	126,248
5	283	15,224	133,823
6	328	20,684	141,852
7	380	27,314	150,363
8	440	35,320	159,385
9	507	44,935	168,948
10	583	56,425	179,085
11	668	70,084	189,830
12	762	86,234	201,220
13	863	105,214	213,293
14	969	127,367	226,090
15	1,075	153,006	239,656
16	1,170	182,349	254,035
17	1,233	215,385	269,277
18	1,221	251,580	285,434
19	1,025	289,034	302,560
20	231	320,714	320,714

Figure 5-11: If you want to have \$100,000 in today's dollars in twenty years, assuming inflation runs at 6%, you'll have to come up with \$331,000 (\$320,714 if you're compounding annually). One way to do it is to save \$480 a month for the duration. This makes the task most burdensome in the early years, because you do not adjust your payments for inflation. Another way, shown here, is to set out to save \$106,000 (to put you in arrears for the first year's inflation.) The result is payments that increase in real terms. The highest payment is about \$575 in today's dollars.

Year	Monthly Payment	Balance In Fund	\$100,000 Inflated at 6%
1	303.79	3,645	106,000
2	322.02	7,874	112,360
3	341.34	12,758	119,102
4	361.82	18,375	126,248
5	383.53	24,815	133,823
6	406.54	32,175	141,852
7	430.93	40,564	150,363
8	456.79	50,102	159,385
9	484.20	60,922	168,948
10	513.25	73,173	179,085
11	544.04	87,019	189,830
12	576.68	102,641	201,220
13	611.29	120,241	213,293
14	647.96	140,041	226,090
15	686.84	162,287	239,656
16	728.05	187,252	254,035
17	771.73	215,238	269,277
18	818.04	246,578	285,434
19	867.12	281,642	302,560
20	919.15	320,835	320,714

Figure 5-12: Another way to compensate for inflation as you save toward a \$100,000 goal in today's dollars. With 10% interest and 6% inflation, your real return is 3.77%. If you start out as if you were saving \$100,000 at that return and adjust your savings for inflation each year, you will arrive on time, and the deposits will be even in constant dollars.

When using Figure 5-7 to calculate how much your savings will be worth in the future, you'll have to figure inflation a little differently. Suppose you plan to save \$100 a month at 10% interest for twenty years, and you project inflation at 7%. The chart tells you that your savings will total \$68,700 ($687 \times \100). The 7% column in Figure 5-4 tells you that the inflation factor will be a depressing 4.04. To calculate the value of your savings in current dollars, you divide by this figure ($\$68,700/4.04 = \$17,005$). Sad news. But remember that your last \$100 deposit will be worth a little less than \$25, so it's not as bad as it seems.

Perhaps this is a bit abstract. Let's look at three real examples. The Lassiters want to make a \$10,000 down payment on a \$17,000 BMW in three years, and they explore what it will take to see them through retirement. We'll also take a look at planning to pay for children's college educations, although this is not yet on the Lassiters' list of priorities, since they have no children. You would follow exactly the same steps to plan for buying a house or any other major item.

How To Buy a BMW

Actually, the Lassiters have enough money to buy a \$17,000 BMW now, but it would deplete their emergency fund and investment assets. They decide to take the conservative approach, to save toward that goal. They plan to accumulate \$10,000 for a down payment and borrow the rest.

Using the coffee can approach, ignoring interest and inflation, the Lassiters would have to set aside about \$278 a month to accumulate \$10,000 in thirty-six months. With their goal so close at hand, compound interest will have relatively little effect; \$278 is in the ballpark.

For short-term goals, those you plan to reach in two or three years, this calculation may be sufficient. You may not need to figure your monthly savings to the dollar, if being a few dollars off or a month late is not crucial. If the Lassiters want to make a more accurate calculation, however, the exact amount they have to put aside will depend on whether they choose to take into account taxes and inflation.

Every week, the business section of the Sunday *New York Times* runs a table called "Consumer Rates," showing average interest paid on money market funds and bank money market accounts, along with other rates not particularly relevant to our current task. A bit deeper in the section is a chart called "Data Bank," which lists up-to-date inflation rates, including the Consumer Price Index. Similar information is available in other major newspapers.

On July 22, 1984, money market funds were paying an average of 10.33% and bank money market accounts were paying 9.62%. The CPI had increased at an annual rate of 3.2% for the latest three months and 4.2% for the year. The consensus seemed to be that interest rates would rise. The Lassiters assume a 5% inflation rate and a 10% return on their deposits in the BMW fund.

If the Lassiters want actually to have \$10,000 in their car account in three years, they will ignore inflation. The \$10,000 will be worth less than it would be now, but inflation does not affect the *number* of dollars in the account, only their value. Taking this approach, they will have to borrow more than \$7,000 to buy the car, since its price can be expected to increase. If they want to increase their goal to keep pace with inflation, they will have to build a larger fund. In the following sections, they make the calculation both ways.

Because of the loan the Lassiters intend to take out, the monthly burden of buying the BMW will not end when they make the down payment. About two-thirds of the people who buy new American cars and three-quarters of those who buy imports borrow money, according to the Motor Vehicle Manufacturers Association. In the early 1970s, most car loans were for three years. Now the average approaches four years, and some lenders are offering five-year loans on expensive cars. The average monthly payment has risen from \$112 in 1973 to \$242. (See Figure 5-13.)

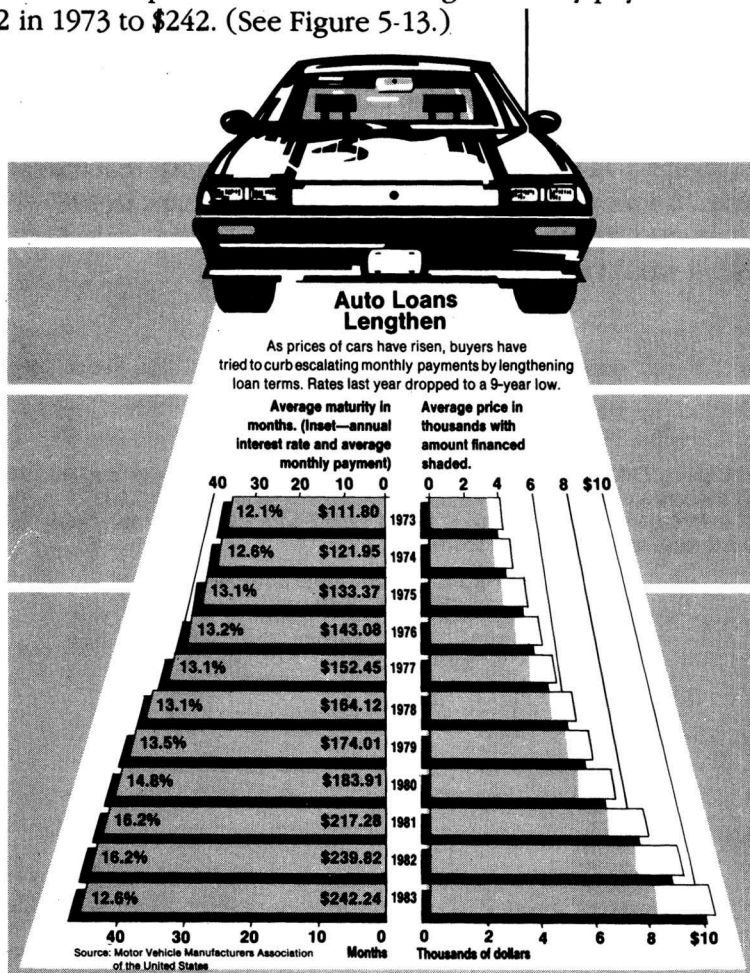


Figure 5-13: Auto loans have crept over the line from short-term debts to medium term debts. Most new car loans are now for forty-eight months, and some lenders are offering loans of sixty months on luxury cars.

The Lassiters must take inflation into account in planning to repay their car loan. They will not be able to figure the monthly payments until they have established their savings program; they don't know yet how much they will have to borrow. It is clear at the outset that buying a BMW will consume significant resources not only for the three years required to save the down payment, but for another four years until the loan is repaid.

IBM users should refer to the following section. Others should skip it and move on to the next.

On *The Home Accountant Plus* (IBM)

The Forecasting module of *The Home Accountant Plus* (absent on other versions of the program) offers several options for calculating the monthly savings necessary to meet a goal, such as the down payment on a car.

If the Lassiters choose to ignore inflation, they will simply calculate the monthly savings required to produce \$10,000 in three years at 10% interest. This calculation is quite easy. Simply enter the Forecasting module, and select Monthly Amount For Future Goal from the menu. Enter 10,000 on the Future Goal line, 10 for Rate of Return, 0 for Inflation Rate, and 1 for Time Frame (Figure 5-14). The display (Figure 5-15) reports that they will have to save \$251.76 a month to reach their goal in three years, in 1987. They could reach it in two by saving \$396.83. If they could save only \$180 (\$179.56, actually), it would take them four years.

```

**HOME ACCOUNTANT PLUS**
      FUTURE GOAL
1. FUTURE GOAL          >>          10000
2. RATE OF RETURN       >>           10
3. INFLATION RATE       >>           0
4. TIME FRAME           >>           1
  
```

Figure 5-14: Using *The Home Accountant Plus* to figure the monthly savings required to reach a future goal. The Lassiters are figuring how much they must save to accumulate \$10,000 for the down payment on a BMW in three years. By selecting "1" as the Time Frame, they will be able to see how much they would have to save to reach the goal sooner.

```

**HOME ACCOUNTANT PLUS**
      FUTURE GOAL
                                FUTURE GOAL =      $10000
                                TIME FRAME =    1985 TO 1996
                                MONTHLY AMT
YEAR
1985          $00000
1986          $ 396.83
1987          $ 251.76
1988          $ 179.56
0000
0000
0000
0000
0000
0000
0000
0000
0000
0000
  
```

Figure 5-15: The Lassiters find that they must save \$251.76 to accumulate \$10,000 in three years at 10% interest. They could reach their goal in two years with monthly savings of \$396.83, or in four, with savings of \$179.56

To find out how much they will need in three years for their car fund to keep pace with inflation, the Lassiters choose Value of Future Investment from the Forecast module menu. (Inflation and compound interest, remember, work exactly the same). They enter \$10,000 on the Investment line, 1 for Display Yr, 5 for Rate of Return, and 0 for Inflation Rate (Figure 5-16). The answer is \$11,615, the first line on the display screen (Figure 5-17).

```

**HOME ACCOUNTANT PLUS**
      FUTURE VALUE

1. INVESTMENT                >>          10000
2. DISPLAY YR (1-20)         >>           1
3. RATE OF RETURN            >>          5%
4. INFLATION RATE            >>          0%

```

Figure 5-16: The Value of Future Investment feature works equally well for determining how much you must accumulate to keep your goal apace of inflation. Here, the Lassiters are calculating how much they will need in three years to match today's \$10,000, if inflation is 5%.

```

**HOME ACCOUNTANT PLUS**
      FUTURE VALUE

INVESTMENT = $10000   YEAR = 1987

PERIOD      FUTURE $          TODAY'S $

JUL          $11615           $11615
AUG
SEP
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN

```

Figure 5-17: If inflation runs 5% a year for three years, the Lassiters will need \$11,615 to match the buying power of \$10,000 today. They would also wind up with \$11,615 if they deposited \$10,000 at 5% interest for three years.

To reach this goal in three years, at 10% interest, the Lassiters must contribute \$292.42 a month to their car fund, compared with \$278 to accumulate \$10,000 at no interest. (Just enter \$11,615 on the Future Goal screen.)

Are these the averages of inflation? Can it turn out that you can actually lose money earning 10% interest when inflation is running at 5%? Actually, no. In real life, 10% interest on uniform monthly payments and 5% inflation would almost cancel each other out. The reason is that the average balance in your account will be half the final amount. The interest would be the same as 5% interest on the ending balance, making 5% inflation about a wash.

The Home Accountant has not made an error. Most of the extra \$14.42 is due to a quirk of the standard mathematical formula for the annual compounding of periodic payments. The formula assumes the entire first year's payment was made on the last day of the year, so you earn no interest the first year. If the \$14 seems important to you, you can figure the monthly deposits required to reach the goal if interest is compounded monthly. (See "Doing It

Yourself.”) The answer is (surprise!) \$278. On the other hand, chances are slim that inflation will be exactly 5% for the next three years, so it’s a somewhat fruitless exercise, and a lot of trouble, too.

There is a quicker way to calculate how much you must save in three years to accumulate the future equivalent of today’s \$10,000, but it may not be as immediately clear how the program works. The Lassiters return to the Future Goal option and enter the data as shown in Figure 5-18. The answer is approximately the same: \$291.45. Even though the amount does not appear on the screen, your savings over the next three years will come to about the same as the \$11,165 we calculated earlier.

```

** HOME ACCOUNTANT Plus **
  FUTURE GOAL
  HA COMPILED JAN 1985

1. FUTURE GOAL      >>    $10000
2. RATE OF RETURN   >>    % 10
3. INFLATION RATE   >>    % 5
4. TIME FRAME       >>    1

      LINE TO EDIT (1-4)
      D(isplay)  E(nd)  G(raph)
      ENTER SELECTION:

** HOME ACCOUNTANT Plus **
  FUTURE GOAL
  HA COMPILED JAN 1985

      FUTURE GOAL = $10000
      TIME FRAME = 1986 TO 1997
      YEAR          MONTHLY AMT
      1986          $875.00
      1987          $437.50
      1988          $291.45
      1989          $218.26
      1990          $174.21
      1991          $144.74
      1992          $123.60
      1993          $107.66
      1994          $95.20
      1995          $85.17
      1996          $76.91
      1997          $69.98

      ENTER SELECTION _____
      PRINT (PrtSc)
      TIME FRAME ( 1 - 100 )  E(nd)

```

Figure 5-18: The Future Goal option displays how much the Lassiters will have to save each month to reach \$10,000 in ten years. Inflation is 5% and interest is 10%.

If the Lassiters want to take into account taxes as well as inflation, they will have to deduct their marginal tax rate from their rate of return. They determined in Chapter 3 that their marginal rate for state and federal income tax for 1984 would be 38% if their income remained about the same. That reduces their effective interest rate at 6.2%. They enter \$10,000, 6.2% rate of

return, and 5% inflation on the Future Goal screen. They find they will have to save \$302.42 a month to build a fund of \$11,615 in three years. (Compounded annually, 5% inflation brings the goal to \$11,576, but we will follow *The Home Accountant's* conventions. The difference is only about \$1 a month.)

(A technical note: earlier versions of *The Home Accountant Plus* and the new Compiled Version, Version 1.5C, figure inflation differently in the Value of Future Investment function. In both versions, the screen displays two columns, Future \$ and Today's \$. In older versions, Today's \$ displays the amount that will actually be in your bank account, and Future \$, the amount that would be required to equal that amount in buying power. The Compiled Version displays the actual amount in your account under Future \$ and the value of that amount in today's dollars in the second column.)

In the following section, the same calculations are repeated using the accompanying charts. IBM users may skip the section unless they want to make calculations without using the Forecasting module.

On Other Versions of *The Home Accountant*

If your version of *The Home Accountant* does not contain a forecasting module, it will still be easy to calculate interest, inflation and monthly payments to reach a goal. Just use the accompanying tables and your pocket calculator.

First, the Lassiters decide to figure how much they must set aside each month at 10% interest to accumulate \$10,000, ignoring inflation. They can find the answer, \$252, in Figure 5-5, which shows the monthly savings required to accumulate \$10,000 at various interest rates over various periods of time.

In three years, of course, \$10,000 won't be worth \$10,000. To figure how much they will need in 1987 dollars to equal the purchasing power of today's \$10,000, the Lassiters will need that amount plus 5% for inflation, compounded for three years.

The calculation is the same as computing 5% interest for three years on \$10,000. They learn from the chart in Figure 5-4 that \$1 would grow to \$1.16 in three years. They will need \$11,600 (the number in the chart times 10,000) to match the buying power of \$10,000 today. (*The Home Accountant Plus* came up with \$11,615 in the last section; the \$5 difference is due to rounding in the chart. The chart in Figure 5-4, remember, compounds monthly. Annual compounding would bring the goal to \$11,576, but we are following the conventions of *The Home Accountant Plus* for the sake of consistency. The difference is only about \$1 a month. Given fluctuations in inflation and interest, none of these calculations is anywhere near that accurate, anyway.)

Returning to Figure 5-5, the Lassiters figure that to reach this goal in three years, earning 10% interest, they must contribute about \$290 a month to their car fund. The calculation: $\$11,600/\$10,000 = 1.16$ (you can do that in your

head); $1.16 \times \$252 = \290 . (Again, we are rounding more than *The Home Accountant Plus* does.)

Monthly savings of \$278, you recall, are required to save \$10,000 in three years with no interest. Will they end up losing money by earning 10% interest, when inflation is running at 5%? Actually, no. Ten percent interest on uniform monthly payments and 5% inflation would almost cancel each other. The reason is that the average balance in their account will be half the final amount. The interest would be the same as 5% interest on the ending balance, making 5% inflation about a wash.

So why does the calculation show that they will have to save \$12 more per month than if they were earning no interest and inflation were 0? There is a quirk in the standard mathematical formula for the annual compounding of periodic payments. The formula assumes the entire first year's payment was made on the last day of the year, so you earn no interest the first year. If the \$12 seems important to you, you can figure the monthly deposits required to reach the goal with monthly-compounded interest. (See "Doing It Yourself.") The answer is \$278. But chances are slim that inflation will be exactly 5% for the next three years, so it's a somewhat bootless, and complicated, exercise.

Taxes as well as inflation will eat into the Lassiters' savings. To take taxes into account, they will have to deduct their marginal tax rate from their interest. They determined in Chapter 3 that their combined state and federal income tax bracket for 1984 would be 38%, if their income did not increase. That reduces their after-tax interest rate to 6.2%. Looking at the 6% column in Figure 5-5, they find that the monthly payments to yield \$10,000 would be \$262. As before, they multiply this by 1.16 to determine how much they must save to accumulate \$11,600. The answer is \$304. That may be a bit high, since they'll actually earn 6.2% interest; but it's probably not worth the trouble of a complicated calculation to adjust for this.

Repaying the Car Loan

In three years, the BMW will cost \$19,745 instead of \$17,000, if inflation is a steady 5% and the price of BMWs increases at the same rate. (Because of rounding, you get \$19,720 if you use the chart.) The Lassiters have devised two savings plans: One for saving \$252 a month and reaching a goal of \$10,000 in inflated dollars, and one for saving \$292 a month (\$304, if they plan to pay income tax out of the interest) and reaching \$11,600 and some change (depending on which way you calculated it). The plan they choose may depend on how much they're willing to pay for the car in the four years after they buy it.

As it turns out, it hardly matters which savings plan they choose.

The Lassiters expect to take out a loan for four years at 14% interest, or an annual percentage rate of 14.93. (An APR simply reflects the price of compounding interest during the year.) From Figure 5-8, they find that their

monthly payment will be \$27.33 for each \$1,000 they borrow. If they borrowed \$7,000 to buy the car today, their monthly payments would be \$191 (7x \$27.33). In four years, the payments would come to \$9,183, of which \$2,183 would be interest. (It costs more to repay a \$7,000 loan over four years than it does to save \$10,000 in three.)

However, if they choose their first saving plan, and accumulate only \$10,000, they will have to borrow \$9,745, since they expect the car to cost \$19,745 in three years. The monthly payments will be \$266.30. The total payments for four years will come to \$12,782. The \$17,000 car has become a \$22,782 car, and it will be four years old by the time they finish paying for it.

How much less will the payments be if they save \$292 a month, to keep pace with inflation, instead of \$252? The second savings plan yields \$11,600 in three years. They would have to borrow \$8,145. They would probably decide to borrow \$8,000, but let's figure the payments for \$8,145, to keep the comparison honest. The monthly payments will be \$222.60, or \$10,685 over four years. The total cost of the car is \$22,285, only about \$500 less than if they had made a down payment of \$10,000.

In terms of expenditures in constant dollars, adjusted for inflation, the total cost of the car over seven years comes out so close to the same by either plan that it hardly matters which they choose. As a matter of fact, the difference is only about \$300, because by borrowing more, the Lassiters will pay a larger proportion of the total in inflated dollars.* Even if the interest rate should shift a couple of points in the three years before they buy the car, it would make a difference of only a few dollars a month.

So we come back to the point where we started. For short-term goals, when inflation is relatively mild (like 5%), complicated calculations may not be worth the trouble. Such is not the case, however, if you're saving large sums of money over long periods of time. Let's take a look at the impact of inflation on planning to send the children to college.

* If you must know, here is the calculation (for zealots and compound interest freaks only). From the chart in Figure 5-4, we know that 5% inflation for three years comes to 16%. For four, it's 22%. This means that the dollars the Lassiters save in the first three years will be inflated by an average of 8%, or that they will be worth an average of 92.6 cents (1/1.08). The dollars they use to repay the loan will be inflated by an average of 16% (for the first three years) plus 11% (the average for the next four). Thus, those dollars will be worth an average of 78.7 cents (1/1.27). Multiplying it out, we find:

Plan A	
\$252 x 36 months	= \$ 9,072 x .926 = \$ 8,401
Loan repayment	= 12,782 x .787 = \$10,059
	<u>\$18,460</u>
Plan B	
\$292 x 36	= \$10,512 x .926 = \$ 9,734
	10,685 x .787 = \$ 8,409
	<u>\$18,143</u>

Planning for College

BMW's and college probably won't mix. Unless your income is comfortably into six figures, putting two kids through Stanford or Yale will make buying sports cars seem like negotiating a gentle curve. By the time the little darlings celebrate their tenth birthdays, you should start thinking about how you're going to pay the bills, even if you have state universities in mind.

How much will it cost? The question defies a general answer. Are we talking about driving a BMW to Stanford or taking the bus to East Overshoe State? Most published estimates suggest that average costs in the mid-1980s are in the \$5,000 per year range for public universities and perhaps twice that for private schools. These estimates are optimistic. The U.S. Department of Agriculture estimates that supporting a five-year-old in a moderate life-style in 1985 will cost more than \$5,000, and a five-year-old doesn't want to drive a car, go out for pizza and beer, or go to Fort Lauderdale for spring break. (See the chart in the chapter on insurance). Tuition alone at some top private universities is more than \$10,000.

The sensible thing to do is gather information about colleges you think your children might consider. Information about college costs and financial aid is readily available from high school guidance counselors and university financial aid offices. Your public library also has a wealth of information on college financing. These sources will give you information on tuition, books, fees, housing, and perhaps food. Make your own estimates of other living costs. In the 1982-1983 school year, the average student spent \$1,455 on transportation, books, supplies, and personal items, according to the American Council on Education. That's a little more than \$160 a month for a nine-month year.

Parents, of course, do not usually pay the full cost of college out-of-pocket. But, on average, they now pay about 60% of college costs, compared with 40% two decades ago. Students make some contributions themselves, from savings, summer jobs, or part-time jobs during the school year.

Federal student aid has been substantially cut during the Reagan era. This makes it especially important to apply early for assistance. If you dally, funds may run out, and you may not receive assistance even if you qualify. Federal grants are still available to the needy, and assistance in the form of government-subsidized loans is often available even to relatively affluent families. You may also be eligible for aid from your state or from individual colleges. Don't overlook Social Security benefits. Full-time students between eighteen and twenty-one are eligible if either of their parents receives retirement or disability checks. Students are also eligible if a parent dies after having worked under Social Security long enough to be covered.

The full-ride academic scholarship, unfortunately, is increasingly difficult to obtain. As college costs have risen, making it difficult for even middle-income families to afford higher education, colleges and universities have turned more and more to distributing assistance on the basis of need. No

more than one student in five receives a scholarship based on academic merit.

As a matter of fact, you may be penalized if you have the good sense to plan ahead and save a substantial sum for college expenses. Financial aid offices will put you through a rigorous needs assessment. Your eligibility will be linked not only to your income, but also to your assets, the size of your family, the number of children in college, how close you are to retirement, and any special financial burdens. Parents are usually not required to liquidate stocks and other assets, but students themselves are expected to contribute a substantial portion of their assets to their education. (And why not? A college education will add more than \$200,000 to their expected lifetime earnings. It's a sound investment.)

Despite the rigorous financial screening for most types of student aid, students may be eligible for reduced-cost Government Guaranteed Student Loans, regardless of their parents' assets. Qualification is solely on the basis of income (up to \$75,000). You give up eligibility for other forms of aid, but it's worth asking your college financial aid office to figure your eligibility both ways. Figure 5-19 shows the amounts parents were expected to contribute to college costs each year under the GSL program, as of 1982.

	Family Size			
	3	4	5	6
Income				
\$35,000	\$4,200	\$3,420	\$2,790	\$2,170
\$40,000	5,430	4,670	3,960	3,160
\$45,000	6,570	5,810	5,110	4,300
\$50,000	7,680	6,950	6,250	5,440
\$55,000	8,680	7,950	7,270	6,490
\$65,000	10,640	9,930	9,270	8,490
\$75,000	12,410	11,700	11,040	10,280

Figure 5-19: Student aid is increasingly based on need, but fairly affluent families may qualify. As of 1982, under the Guaranteed Student Loan Program, these were the amounts families were expected to contribute to their children's college costs, based on family size and income. Because need is based on ability to pay, you may qualify for more aid if your children choose very expensive colleges.

Eligibility requirements and the availability of financial aid shift constantly. (Mostly in the wrong direction, lately.) If you're planning your children's education from the time they reach ten, as you should, it may be impossible to make a reliable projection of how much financial assistance you will be able to obtain. Despite the risk of losing eligibility for financial aid, saving for the children's college is the sensible thing to do.

Let's suppose you have three children who will be starting college in 1997, 1998, and 2000. (If you'd thought about paying for college, you might have taken another sort of planning more seriously.) You figure they'll go to public universities, so you plan to provide each \$5,000 (today's dollars) per

year for four years. If it looks as if they might want to go to Stanford, you'll worry about where to find the money later.

The bill will come to \$60,000, in 1984 dollars. But you figure inflation will average 6% for the next twenty years. We'll compound annually in this example. (If you're following along on *The Home Accountant Plus*, remember that the Value of Future Investment feature of the Forecasting module compounds monthly.) If all three children go to state universities that would cost \$5,000 a year now, the cost for their freshman years will be \$10,061, \$10,665, and \$11,983, respectively. The total cost of their combined twelve years in college will be \$143,090, not \$60,000.

Now suppose you can earn 10% interest on your savings. You may actually be able to earn this amount, after taxes, by transferring your savings to your children through gifts or trusts. (See the chapter on reducing taxes.) Unless the child has other income, the first \$1,000 a year in interest will be tax-free, and any amount above that will be taxed at a much lower rate than you would have to pay if the savings were in your name.

How much do you have to save each year to put the kids through school? Frankly, there doesn't seem to be a simple way to calculate this. If you figure each child's college cost separately and save at a rate that will accumulate that amount at the end of his or her sophomore year, you won't be far off. In Figure 5-20, Child 1's expenses will come to \$44,014, and he will be a sophomore in the fourteenth year. For this child alone, annual savings of \$1,573 are needed to accumulate that amount in time for his junior year.

Savings Required To Educate Three Children
Assuming 10 Percent Interest, 6 Percent Inflation,
Compounded Annually

Year	College Expenses				Fund Balance
	Savings	Child 1	Child 2	Child 3	Total
1984	4,150				4,150
1985	4,150				8,715
1986	4,150				13,736
1987	4,150				19,260
1988	4,150				25,336
1989	4,150				32,020
1990	4,150				39,372
1991	4,150				47,459
1992	4,150				56,355
1993	4,150				66,140
1994	4,150				76,904
1995	4,150				88,745
1996	4,150				90,702
1997	4,150	10,061			10,061
1998	4,150	10,665	10,665		21,330
1999	4,150	11,305	11,305		22,610
2000	4,150	11,983	11,983	11,983	35,949
2001	4,150		12,702	12,702	25,404
2002	4,150			13,464	13,464
2003	4,150			14,272	14,272
Totals	78,850	44,014	46,655	52,421	143,090

Figure 5-20: At 6% inflation, it may cost \$143,000 to send three students to a state university by the turn of the century. One solution is to save \$4,150 a year. However, this places the heaviest savings burden in the early years, when other priorities may have the edge over saving for college.

It turns out that it will take annual savings of \$4,150 (a figure arrived at in a few minutes by trial and error on a spreadsheet) for the next nineteen years to see the children through school. That's a pretty heavy burden, but your total deposits will come to \$78,850, which is considerably less than the total \$143,000 bill. Moreover, if your tax bracket is 40% and you have escaped paying taxes by transferring assets to the children, Uncle Sam will have chipped in more than \$25,000 (actually your own money that otherwise would have gone to taxes). Trusts and custodial bank accounts dedicated to children's educations are often referred to as "tax scholarships."

Figure 5-21 (also arrived at by trial and error) suggests another way to meet the college bill. Again, interest is assumed to be 10%, and inflation, 6%. However, in this example the annual savings are increased by 6% each year to match inflation. The \$7,849 you set aside in 2003 will have exactly the same buying power as the \$2,750 you save in 1984. Thus, the burden is spread evenly over nineteen years. Your deposits, however, add up to \$92,840, some \$14,000 more than in the first example. Because you deposit more dollars later, you earn less interest and save less on taxes by transferring income to children.

Savings Required To Educate Three Children
Assuming 10 Percent Interest, 6 Percent Inflation,
Compounded Annually

Year	Year's Savings	College Expenses				Fund Balance
		Child 1	Child 2	Child 3	Total	
1984	2,750					2,750
1985	2,915					5,940
1986	3,090					9,624
1987	3,275					13,862
1988	3,472					18,720
1989	3,680					24,272
1990	3,901					30,600
1991	4,135					37,795
1992	4,383					45,957
1993	4,646					55,199
1994	4,925					65,644
1995	5,220					77,428
1996	5,534	10,061			10,061	80,644
1997	5,866	10,665	10,665		21,330	73,244
1998	6,217	11,305	11,305		22,610	50,837
1999	6,591	11,983	11,983	11,983	35,949	26,562
2000	6,986		12,702	12,702	25,404	10,800
2001	7,405			13,464	13,464	5,821
2002	7,849				14,272	(19)
2003						
Totals	92,840	44,014	46,655	52,421	143,090	

Figure 5-21: Another solution to the problem posed in Figure 5-19 is to increase savings each year to keep pace with inflation. In constant dollars, the savings remain the same each year. This chart was arrived at by trial and error on a spreadsheet program. There doesn't seem to be a simple alternative for making the calculation.

(Warning to *Home Accountant Plus* users: because the Value of Future Investment feature compounds monthly, you will distort your calculations if you use it to figure future college costs. If you compound inflation monthly

but savings interest annually, the required savings in this example jumps \$4,500 a year.)

The same techniques could be used to plan for any medium-term goal.

So far, we've figured it would take about \$300 a month (or \$3,600 a year) to accumulate \$10,000 for the down payment on a sports car, and \$2,750 to make a start on saving for college for three children. That's \$6,350 a year, if you're trying to do both. So the Lassiters' \$7,500-a-year savings, which seemed so ample, might not be enough to allow them to buy expensive cars *and* to save seriously for three children's college educations. (And, if they had three children, they would not be able to maintain their current lifestyle and still save \$7,500 a year.)

Moreover, the Lassiters have not budgeted their \$4,000 a year for their IRAs. Next, we'll take a look at how to figure out how much you need to save for retirement, and whether \$4,000 in two IRAs will be enough.

As you can see, saving for major goals is expensive. Little wonder few people can work toward more than one at a time.

Planning for Retirement

"The next time I retire, I am going to study it more first," a North Carolina man wrote to "The Golden Years," a newspaper column distributed by the Los Angeles Times Syndicate. "I am going to talk to a lot of people in a variety of retirement situations. And I am going to read a lot of books and articles to get different opinions. Then I am going to remember what applies to me, and junk the rest..."

"The problem with the thing is that it takes you about ten months to unlearn what people told you about retirement, and do a crash course on what they never mentioned. Take money. That's the big monkey that rides your back into retirement. Not the amount of it, because most people now get a pension and Social Security. What's tough is the mechanics of money. My wife and I had an awful time adjusting to a once-a-month payday, which is how retirement income arrives. After twenty years of being paid on the first and fifteenth, somebody should have warned me I might go hungry about the twenty-fifth of each month."

Well, you've been warned. If you've been planning your finances for years on *The Home Accountant*, you may not suffer so much from a shift in when your income arrives. But you must plan for a great many changes in your lifestyle, and you're the only one who can adapt your opportunities earlier in life to your retirement needs. Take the information you need, and junk the rest.

For many people, maybe most, the gentleman from North Carolina is flat wrong about the amount of money not being a problem. Kent Collins, who writes the column, observes that the average retired person's savings come to only \$20,000. That sum won't stretch far over fifteen or twenty years. On average, workers' incomes drop by 50% when they retire. Figures from the

federal government confirm the suspicion that most people enter retirement short of funds. In the fall of 1981, a "higher budget" for an urban retired couple was \$15,078, according to the Bureau of Labor Statistics. (See Figure 5-22). That was the last year the government published that series of figures, and the amount required to sustain that standard of living will have risen somewhat. But \$15,000 will not support two people at a "higher" standard of living, by most people's definition.

Annual budgets for a retired couple of 3 levels of living, urban United States, autumn 1981			
Component	Lower budget	Intermediate budget	Higher budget
Total budget ¹	\$7,226	\$10,226	\$15,078
Total family consumption	6,914	9,611	13,960
Food	2,183	2,898	3,642
Housing	2,377	3,393	5,307
Transportation	553	1,073	1,960
Clothing	244	409	629
Personal care	198	290	424
Medical care ²	1,085	1,091	1,098
Other family consumption	275	457	901
Other items	311	615	1,118

¹ Beginning with the autumn 1973 updating of the budgets for a retired couple, the total budget is defined as the sum of "total family consumption" and "other items." Income taxes are not included in the total budgets.

² The autumn 1981 cost estimates for medical care contain a preliminary estimate for "out-of-pocket" costs for medicare.

NOTE: Because of rounding, sums of individual items may not equal totals.

Source: U.S. Department of Labor, Bureau of Labor Statistics, 1982. Three budgets for a retired couple, autumn 1981, News, USDL 82-266.

Figure 5-22: According to the Bureau of Labor Statistics, a budget of \$15,078 would support a retired couple at a "higher" lifestyle in 1981. By most people's standards, \$15,000 would offer a pretty modest standard of living for two people.

The BLS report contained another important item: the "higher budget" was 8.3% higher than the year before. Medical care and transportation showed the largest increases, 15% and 12%, for the higher budget retired couple. The Consumer Price Index rose 10.4% that year. Moreover, energy prices, a difficult expense for retired people to control, has been one of the most volatile categories in the CPI since 1970. (See Figure 5-23.)

Once you retire, there will be little opportunity to increase your income. You should plan conservatively to allow for some flexibility, after your ability to adapt to rising prices has diminished. Most advisers recommend that you begin serious planning for retirement at least fifteen years in advance.

There are two preeminent questions to answer. How much income will you need when you retire? And what must you do to fill the gap between that amount and the amount you can expect to receive from Social Security, pensions, and other resources you've already set aside for retirement?

Unfortunately, it is likely that you will not be able to afford to provide for as much income as you would like. The rule of thumb for income is that you will need 60% to 80% of your current disposable (after-tax) income, adjusted for inflation.

CONSUMER PRICE INDEXES—ANNUAL PERCENTAGE CHANGE IN MAJOR GROUPS: 1970 TO 1983

ALL ITEMS	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983 ¹
All Items	5.9	4.3	3.3	6.2	11.0	9.1	5.8	6.5	7.7	11.3	13.5	10.4	6.1	3.5
Food	5.5	3.1	4.3	14.5	14.4	8.5	3.1	6.3	10.0	10.9	8.6	7.9	4.0	2.4
Housing														
Rent, residential	4.2	4.6	3.5	4.3	5.1	5.1	5.4	6.1	6.8	7.3	8.9	8.7	7.6	6.0
Home ownership	10.8	4.	4.8	4.7	11.3	11.3	5.6	6.9	10.9	15.5	19.7	12.3	6.8	.1
Home purchase	8.0	5.5	4.2	2.1	7.5	12.3	5.1	6.6	9.6	13.4	14.0	5.3	5.2	8.8
Mortgage interest	10.1	-8.9	-2.4	4.9	13.8	1.4	-8	-1.7	5.9	12.7	18.6	16.2	3.4	-16.7
Fuel oil and coal ²	4.3	6.7	.9	14.8	57.8	9.7	6.6	13.0	5.3	35.1	37.9	21.6	-1.2	-3.7
Gas and electricity	4.4	6.9	5.1	4.9	15.3	16.3	11.4	12.9	9.0	10.8	17.1	14.6	13.8	10.3
Apparel and upkeep	4.1	3.2	2.1	3.7	7.4	4.5	3.7	4.5	3.5	4.4	7.1	4.8	2.6	2.4
Private transportation	4.3	5.0	.8	3.4	12.4	9.7	9.9	7.3	4.8	14.8	17.4	11.4	3.6	3.6
Automobiles, new	3.1	4.1	-9	.1	5.8	8.6	6.3	5.3	7.6	7.9	8.0	6.1	3.8	2.0
Gasoline .....	.9	.7	1.2	9.8	35.4	6.8	4.2	5.8	4.3	35.3	39.0	11.3	-5.3	2.8
Auto insurance rates	13.7	11.4	-4	-1.8	.1	5.6	28.8	12.0	2.9	5.6	8.2	4.7	6.4	10.9
Public transportation	14.0	7.2	4.1	1.0	2.2	7.2	9.8	4.7	3.0	6.7	25.6	24.0	10.9	5.0
Intercity bus fare	7.0	12.1	5.6	4.0	10.5	15.5	5.9	13.5	7.5	8.2	14.3	14.4	8.5	9.8
Medical care	6.4	6.5	3.2	3.9	9.3	12.0	9.5	9.6	8.4	9.3	10.9	10.8	11.6	9.4
Entertainment	5.2	5.3	2.9	2.8	7.5	8.9	5.0	4.9	5.3	6.7	8.9	7.8	6.5	4.4
Personal care	3.6	3.2	2.6	4.5	9.7	9.8	6.5	6.5	6.5	7.6	8.8	8.9	7.0	5.2
All services	8.1	5.6	3.8	4.4	9.3	9.5	8.3	7.7	8.5	11.0	15.4	13.1	9.0	3.3
All commodities	4.7	3.4	3.0	7.4	12.0	8.9	4.3	5.8	7.1	11.4	12.2	8.4	4.0	3.6

¹ Change from May 1982 to May 1983.

² Includes bottled gas.

[Minus sign (-) indicates decrease]

Figure 5-23: The Consumer Price Index may not be an accurate measure of the effect of inflation on retired people, who may be affected disproportionately by some categories of expenses and not at all by others. Energy costs, for example, have been the most volatile category since 1970. According to the Bureau of Labor Statistics, retired people also are affected disproportionately by medical and transportation costs. On the other hand, mortgage interest, another erratic category, may have no effect at all on a retirement budget.

This is a modest goal, unless your current income is high. True, you will pay less taxes. You will probably have no dependents. You will no longer need to save systematically; retirement is what you are saving for. Your mortgage may be paid. You may realize a sizeable capital gain (tax-free up to \$125,000, after you're fifty-five) by selling your house and moving to a smaller one. Medicare will pay some of your medical expenses. But your health care costs may increase, especially if you're now covered by good medical insurance as a fringe benefit at work. You will need supplemental insurance. Seventy percent of retired people report that their health is good or excellent, but medical bills inevitably rise in old age. You will have no work-related expenses— transportation, lunches downtown, business suits, whatever. You may be able to get by with one car instead of two. (But do you want to?)

On the other hand, you will probably want a cushion against inflation, since it will be difficult to increase your income. And you will have a great deal of leisure time. Recreation in the style you have in mind may be expensive. Do you hope to travel? Buy a boat? A membership in an expensive country club at a retirement resort? A Winnebago? A Ferrari? An end to work does not mean an end to spending goals.

Sixty to eighty percent of your current income, depending on how much that is and how you spend it, may meet only your base-line needs. It may support you more or less in the style to which you've become accustomed, but not allow you to make a major shift in recreational lifestyle.

You will not have to live on Social Security, your pension, and your earnings on investments alone. None of us lives forever. It is reasonable to plan to spend some of the assets you've accumulated during your working life. On average, white men who retire at sixty-five can expect to live a little over fourteen years; white women can expect to live more than eighteen years. The figures for black men and women are a little less than thirteen years and more than sixteen years, respectively. (See Figure 5-24). You will be hoping to beat the odds.

AGE AND SEX	WHITE					BLACK	
	1949-1951	1959-1961	1969-1971	1975	1980	1975	1980
AVERAGE EXPECTATION OF LIFE IN YEARS							
At birth: Male	66.3	67.6	67.9	69.5	70.7	62.4	63.7
Female	72.0	74.2	75.5	77.3	78.1	71.3	72.3
Age 20: Male	49.5	50.3	50.2	51.5	52.4	45.2	46.0
Female	54.6	56.3	57.2	58.8	59.4	53.7	54.3
Age 40: Male	31.2	31.7	31.9	33.1	34.0	28.8	29.1
Female	35.6	37.1	38.1	39.5	40.1	35.3	35.7
Age 50: Male	22.8	23.2	23.3	24.4	25.2	21.6	21.6
Female	26.8	28.1	29.1	30.4	30.9	27.2	27.3
Age 65: Male	12.8	13.0	13.0	13.8	14.2	13.1	12.9
Female	15.0	15.9	16.9	18.2	18.5	16.7	16.5

Figure 5-24: You will be hoping to beat the actuarial odds when you retire. Even if your lifespan is only normal, you must plan to live on your retirement income for fifteen to twenty years. Women live longer than men, and whites longer than blacks.

Budgeting

Projecting your retirement budget requires personal decisions, much as drawing up your current budget does. You will have to weigh your priorities, needs, and ability to save. The process is much like assessing your life insurance needs. However, you will probably want to be more optimistic in planning your retirement than you are in devising an insurance program. The latter provides you with the means to get by in the worst case. In contemplating retirement, you are planning for what you hope, and expect, to happen. Your *Home Accountant* budget is the place to start.

As a starting point, the Lassiters pull out the *Home Accountant* balance sheet they worked out in Chapter 2 and the income, spending reports, and tentative budget from Chapter 3. If you have a full year's budget, use that. But, if you've been following along with the Lassiters, you will recall that they did not attempt to budget their expenditures for the first half of 1984, so the Budget column for each income and spending category is filled with zeros. Later, they entered tentative budget figures in each income and spending category for the second half of the year, but they do not have actual figures for the period. To obtain a full year's budget, you can make a copy of your accounts disk and copy the actual expenditures for the first half of the year into the Budget column. (This is done category by category through the Edit

Categories option in the Budget module.) The Lassiters' income budget is shown in Figure 5-25, and their spending budget in Figure 5-26.

BUDGET FOR
SUSAN & TOM LASSITER

PAGE 3

INCOME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
WAGES/1	3488	3488	4419	3488	3488	3488	3643	3643	3643	3643	3643	3643	43717
RECEIPTS GROSS/T/*	250	0	0	500	0	200	0	0	0	0	0	0	950
INTEREST/T	108	103	93	93	97	99	100	100	100	100	100	100	1193
DIVIDENDS/T	130	0	0	129	0	0	130	0	0	130	0	0	519
TOTAL INCOME	3976	3591	4512	4210	3585	3787	3873	3743	3743	3873	3743	3743	46379

Figure 5-25: The Lassiters' income budget projects after-tax employment income of \$43,717. In their retirement calculations, they do not count other income. You might want to, if you rely on non-employment income to meet your basic spending needs.

BUDGET FOR
SUSAN & TOM LASSITER

PAGE 4

EXPENSE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
MORTGAGE	700	700	700	700	700	700	700	700	700	700	700	700	8400
VOLVO LOAN	246	246	246	246	246	246	246	246	246	246	246	246	2952
UTILITIES	392	347	212	195	97	67	100	125	150	75	125	225	2110
TELEPHONE	145	102	64	183	175	88	125	125	125	125	125	125	1507
FOOD	228	214	265	283	269	302	275	275	275	275	275	275	3211
DOCTORS ETC/T	250	132	250	310	250	275	250	250	250	250	250	250	2967
CLOTHES	295	124	46	193	191	211	175	175	175	175	175	175	2110
CAR EXPENSES	370	213	38	23	0	95	100	313	100	100	100	100	1552
HOME REPAIRS	71	0	0	127	0	563	100	100	100	100	100	100	1361
PUBLICATIONS	74	23	38	26	67	26	50	50	50	50	50	50	554
ENTERTAINMENT	120	69	106	122	102	169	125	125	125	125	125	125	1438
DINING OUT	146	46	58	51	78	126	80	80	80	80	80	80	985
VACATIONS	0	2734	0	0	0	0	0	0	0	0	0	0	2734
FURNISHINGS	126	0	0	632	0	0	125	125	125	125	125	125	1508
MISCELLANEOUS	447	378	480	475	536	411	450	450	450	450	450	450	5427
TOTAL EXPENSE	3610	5328	2503	3566	2711	3279	2901	3139	2951	2876	2926	3026	38816
NET INCOME	366	1737	2009	644	874	508	972	604	792	997	817	717	7563

Figure 5-26: The Lassiters' budget shows annual expenditures of \$38,816 and savings of \$7,563. These figures will be the basis of their planning for a retirement budget.

They already know that their combined employment income is \$60,800 (\$33,500 for Susan, \$27,300 for Tom). From their income budget, they quickly put their after-tax employment income at \$43,717. Since they have entered their take-home pay in their *Home Accountant* budget, federal and state withholding and Social Security taxes have already been deducted. They are not including tax refunds, earnings on investments, or Susan's freelance income in the following calculations. They do not count on these income sources in their spending budget. You should probably include these items if you count on them to meet your basic budget. According to the Lassiters' spending budget, they will spend \$38,816 by year's end, and save \$7,563.

They know from their balance sheet that they have \$27,234 in income-producing assets (the money market account and the XYZ Mutual Fund shares). They also have \$4,016 in their IRAs.

Figure 5-27 compares the Lassiters' current expenses with their retirement budget. Essentially, they have assumed that they will have paid off their mortgage, eliminated savings. They have cut back a bit on car expenses, since they will not be driving to work, and on entertainment. The other categories are about the same. They have, for example, left funds in the budget to repay a car loan. (The cars they have when they retire are not apt to last twenty years.) They have not included money for savings, because they will be living off their savings. They have, however, planned on income taxes of 20%. This is a good rule-of-thumb figure for retired people. Medical care, for now, is a big uncertainty. They have not examined Medicare coverage and the cost of supplemental insurance.

Category	Current	Proposed	
MORTGAGE	8,400	1,200	
VOLVO LOAN	2,952	3,000	
UTILITIES	2,110	2,200	
TELEPHONE	1,507	1,500	
FOOD	3,211	3,300	
DOCTORS ETC/T	2,967	3,000	
CLOTHES	2,110	2,000	
CAR EXPENSES	1,552	1,000	
HOME REPAIRS	1,361	1,200	
PUBLICATIONS	554	100	
ENTERTAINMENT	1,438	1,000	
DINING OUT	985	1,000	
VACATIONS	2,734	2,500	
FURNISHINGS	1,508	1,000	
MISCELLANEOUS	5,427	5,500	
TOTAL	38,816	29,500	76%
SAVINGS	7,563		
AFTER-TAX INCOME	46,379	29,500	64%
TAXES	15,371	7,375	
	=====	=====	
INCOME	61,750	36,875	

Figure 5-27: The Lassiters' retirement budget assumes their mortgage is paid off and eliminates savings. Still, they will need 76% of their current take-home pay to maintain their current lifestyle. Taxes, calculated at 20% of gross income, add another \$7,385.

For now, having already tangled once with compound interest and inflation, they will leave inflation out of consideration. When it comes time to match their projected income to their spending needs, however, they will either have to inflate their budget or adjust their anticipated return on investments to take inflation into account. If you figure your retirement budget on *The Home Accountant Plus*, the Forecasting module will quickly calculate the effects of inflation, category by category.

The Lassiters' retirement budget is fairly conservative, without much slack for unexpected expenses. For example, it does not leave room for mortgage payments, even though the Lassiters figure it is likely that they will move to other cities or trade up several times before they retire. They figure, at this conservative level, that their spending would be 76% of their current expending, 63% of their total after-tax income.

The Lassiters are in their early thirties; retirement is a long way off. Later in their lives, as retirement takes on a higher priority relative to their other goals, they might try more to increase their retirement income. In any case, costs and spending patterns thirty to thirty-five years hence are impossible to predict. For now, they're simply laying down the base.

The next step is to figure the retirement income they can expect other than investments they make toward retirement.

Social Security

The Social Security system, you must have noticed, has been in trouble. The amendments Congress enacted in 1983 will strengthen the system. Social Security taxes are gradually increasing; people with higher incomes must now pay taxes on a portion of their benefits, and, beginning in 2000, the normal retirement age will begin slipping back until it reaches sixty-seven in 2027. You will be affected if you were born after 1938.

The system still faces severe strains, as the population grows older. A smaller and smaller group of workers, proportionally, will have to support a growing number of retirees. Your contributions to the system will have long since been spent by the time you retire. Congress will tinker with the system further. There has even been talk of limiting benefits to those who have no other source of retirement income. Still, it borders on inconceivable, short of economic chaos, that Congress will allow the system to collapse. The political and social price would be far too high.

What the benefits will be in ten, or fifteen, or twenty years, however, is beyond forecasting. The best we can do is figure what they would be—approximately—if you reached sixty-five and retired today. Even that is a tall order. The authors of the Social Security laws are the same people who wrote the Internal Revenue Code. If you want to give it a shot, fill out the form in Figure 5-28. (It will only work if you're at least in your fifties.)

Here is how to simulate the amount

Follow the directions below and you'll find out the approximate amount of the monthly checks you'll get from Social Security after you retire.

Step 1

The amount of your check is based on your earnings over a period of years. Based on the year you were born, pick the number of years you need to count from the following chart:

Retirement benefits	
Year you were born	Years needed
1919	25 years
1920	26
1921	27
1922	28
1925	31
1929 or later	35*

*Maximum number of years that count

Step 2

Fill in the worksheet for the year you reach 62. Column "A" shows maximum earnings covered by Social Security. In Column "B," list your earnings beginning with 1951. Write "0" for a year of no earnings. If you earned more than the maximum in any year, list only the maximum for each year. Estimate your earnings for future years, including any years you plan to work past 65. Stop with the year before you retire or plan to retire.

Step 3

Multiply the amount in Column B (not to exceed the maximum) for each year by the factor in Column C for the year you reach 62. Write the result in Column D.

Step 4

Cross off your list the years of your lowest earnings until the number of years left is the same as your answer to Step 1. (You may have to leave some years of "0" earnings on your list.)

Step 5

Add up the earnings for the years left on your list. Write this figure in the space marked TOTAL at the bottom of the worksheet and here.

\$ _____

Step 6

Divide this total by the number you wrote for Step 1. The result is your average indexed *yearly* earnings covered by Social Security. Write the figure here.

\$ _____

Step 7

Divide your average indexed yearly earnings by 12. The result is your *average indexed monthly earnings*. Round the result to the next lower dollar. Write your figure here.

\$ _____

Step 8 (for workers who reached 62 in 1984)

Multiply the first \$267 of your average indexed monthly earnings by 90 percent. Write the result here.

\$ _____

Multiply the next \$1,345 of your average indexed monthly earnings by 32 percent. Write the result here.

\$ _____

Multiply any remaining amount by 15 percent. Write the result here.

\$ _____

Add the figures. Write the answer. Here. Total: \$ _____ This is your total basic benefit.

You are eligible for "Cost-of-Living" increases starting with the year you reach 62.

Round to the next lower dollar. This is your age 65 benefit.

\$ _____

The information contained in this figure is complex. Should you need assistance in estimating your benefit, contact your local Social Security office.

If you choose benefits before 65

If you choose to receive retirement benefits before you become 65, your benefit rate is permanently reduced. The amount of the reduction depends on the number of months you receive benefits before 65. Here is how to figure your reduced benefits.

Look at the following chart to find the number of months you will receive benefits before 65. Then, multiply your age 65 benefit by the reduction factor. The result is your estimated dollar benefit. Round to the next lower dollar. Write the figure here.

\$ _____

Reduction Months	Reduction Factor	Reduction Months	Reduction Factor
1	.994	19	.894
2	.988	20	.888
3	.983	21	.883
4	.977	22	.877
5	.972	23	.872
6	.966	24	.866
7	.961	25	.861
8	.955	26	.855
9	.950	27	.850
10	.944	28	.844
11	.938	29	.838
12	.933	30	.833
13	.927	31	.827
14	.922	32	.822
15	.916	33	.816
16	.911	34	.811
17	.905	35	.805
18	.900	36	.800

Wives and Husbands benefits

The benefit rate for your wife or husband at age 65 is one-half of your age 65 benefit. Divide your age 65 benefit by 2. Round to next lower dollar. Write the amount here.

\$ _____

If your wife or husband starts to get benefits before 65, the rate is permanently reduced. Look in the chart below to find the number of months she or he will receive benefits before 65. Then multiply the age 65 benefit by the reduction factor. Round to next lower dollar. Write the figure here.

\$ _____

This is your wife's or husband's reduced benefit.

Reduction Months	Reduction Factor	Reduction Months	Reduction Factor
1	.993	19	.868
2	.986	20	.861
3	.979	21	.854
4	.972	22	.847
5	.965	23	.840
6	.958	24	.833
7	.951	25	.826
8	.944	26	.819
9	.937	27	.812
10	.930	28	.805
11	.923	29	.798
12	.916	30	.791
13	.909	31	.784
14	.902	32	.777
15	.895	33	.770
16	.888	34	.763
17	.881	35	.756
18	.875	36	.750

Worksheet							
You reach 62 in							
	A	B	C	C	C	C	D
YEAR			1981	1982	1983	1984	
1951	3,600		4.1	4.5	4.9	5.2	
1952	3,600		3.9	4.2	4.6	4.9	
1953	3,600		3.7	4.0	4.4	4.6	
1954	3,600		3.6	4.0	4.4	4.6	
1955	4,200		3.5	3.8	4.2	4.4	
1956	4,200		3.2	3.5	3.9	4.1	
1957	4,200		3.2	3.4	3.8	4.0	
1958	4,200		3.1	3.4	3.7	4.0	
1959	4,800		3.0	3.2	3.6	3.8	
1960	4,800		2.9	3.1	3.4	3.6	
1961	4,800		2.8	3.1	3.4	3.6	
1962	4,800		2.7	2.9	3.2	3.4	
1963	4,800		2.6	2.8	3.1	3.3	
1964	4,800		2.5	2.7	3.0	3.2	
1965	4,800		2.5	2.7	3.0	3.1	
1966	6,600		2.3	2.5	2.8	2.9	
1967	6,600		2.2	2.4	2.6	2.8	
1968	7,800		2.1	2.2	2.5	2.6	
1969	7,800		1.9	2.1	2.3	2.5	
1970	7,800		1.9	2.0	2.2	2.3	
1971	7,800		1.8	1.9	2.1	2.2	
1972	9,000		1.6	1.8	1.9	2.0	
1973	10,800		1.5	1.7	1.8	1.9	
1974	13,200		1.4	1.6	1.7	1.8	
1975	14,100		1.3	1.4	1.6	1.7	
1976	15,300		1.2	1.4	1.5	1.6	
1977	16,500		1.2	1.3	1.4	1.5	
1978	17,700		1.1	1.2	1.3	1.4	
1979	22,900		1.0	1.1	1.2	1.3	
1980	25,900		1.0	1.0	1.1	1.2	
1981	29,700		1.0	1.0	1.0	1.1	
1982	32,400		1.0	1.0	1.0	1.0	
1983	35,700		1.0	1.0	1.0	1.0	
1984	37,800		1.0	1.0	1.0	1.0	
1985	37,800*		1.0	1.0	1.0	1.0	
TOTAL			\$				

* The maximum amount of annual earnings that counts for Social Security rises automatically as earnings levels increase. Because of this, the base in 1985 and later may be higher than \$37,800.

Figure 5-28: The formula for calculating Social Security benefits is quite complicated. If you're sixty or over and have a Statement of Earnings (available on request from the Social Security Administration), your local Social Security office will figure your benefits for you.

If you're sixty or older, your local Social Security office will estimate your benefits for you. Most advisers recommend that you fill out a Request for Statement of Earnings every few years during your career. Forms are available at your local Social Security office. Three or four weeks after you mail the form to the Social Security Administration in Baltimore, you'll receive a form listing your past earnings. You can check these against your tax returns to make sure they're not understated. Corrections become more difficult after three years.

The maximum benefits in 1984 for a worker who retired at sixty-five were \$703 a month. For a worker who retired at sixty-two, the maximum was \$559 (80% of the full benefit). A two-income family might receive as much as \$16,872 a year in Social Security benefits. However, to qualify for that amount, you must have earned the maximum taxable amount, which has become pretty hefty: \$37,800 in 1984. In 2027, the year the normal retirement age reaches sixty-seven, the benefit for early retirement will be reduced from 80% to 70% of the full benefit.

The spouse with less or no income (we will assume for the sake of grammatical construction that it is the wife) is entitled benefits, whether or not she qualifies for Social Security separately. If she retires at sixty-five, she will receive benefits based on her own earnings or 50% of her spouse's benefit, whichever is larger. If she retires at 62, she will be eligible for 37.5% of her husband's benefits, if that figure is higher than her own benefit.

Widows, widowers, and their children may also be eligible for survivors' benefits. A surviving spouse with dependent children is entitled to 75% of the deceased worker's Social Security benefit, but the amount will be reduced or eliminated if the parent has employment income. Surviving children are eligible for 75% of the deceased worker's benefit until they are eighteen, or until they are nineteen if they are full-time students. Benefits for college students, who in the past have been eligible until age twenty-two, are being phased out.

If you earn income from employment after retirement (earnings on investments do not usually count), your Social Security benefits may be reduced. As of 1984, if you are sixty-five or older, you can earn up to \$6,960 and still receive full benefits. If you are under sixty-five, the maximum is \$5,160. Your Social Security benefits will be reduced by \$1 for every \$2 you earn above these amounts. Beginning in 1990, the reduction will be \$1 for every \$3 in earnings above the exemption for people over sixty-five.

The Lassiters decide to figure \$12,000 a year for Social Security. It's just a guess. They are probably just beginning the years that will count toward their Social Security benefits. If you're getting closer to retirement, you may have enough salary history to make a more accurate calculation.

Beginning in 1984, higher-income Social Security recipients must pay taxes on a portion of their benefits. The cutoff is based on Adjusted Gross Income (from Form 1040), plus income from tax-exempt bonds, plus one-half of Social Security benefits. Married couples filing jointly must pay taxes

on some of their benefits, if this figure is above \$32,000. The base level is \$25,000 for individuals and zero for married couples filing separately. The taxable amount of benefits is the smaller of 1) 50% of the amount by which you exceed the base level or 2) 50% of your total benefits.

For example, suppose the Lassiters met their goal of \$36,875, including \$12,000 in Social Security benefits. The tax calculation would look like this:

AGI + 50% Social Security + Tax exempt bond income equals \$30,875, which is less than the base amount. Thus, they wouldn't be taxed on their Social Security benefits.

If they managed to scrape up another \$3,000 a year, however, they would have to pay taxes on benefits. The calculation:

AGI +	
50% Social Security +	
Tax exempt bond income	\$33,875
Less base amount	32,000
Excess	\$ 1,875
50% of excess	938
50% benefits	6,000
Taxable benefits	938

Social Security, then, is not (and never was) intended to be a full pension. Depending on unpredictable economic shifts in the coming decades, it may provide an even smaller proportion of the income you will need in retirement. Even now, you must supplement Social Security with private resources.

Pension Plans

About half of those who work for private business and three-quarters of the civilians who work for governments are covered by some type of pension. Pension plans vary so radically that there's little a book can do to help you determine your benefits. You'll have to ask your employer. Your company may provide an annual statement estimating your retirement income, combining pension benefits and Social Security. In that case, you'll be spared the task of figuring your Social Security benefits as well. A brief overview will help you determine what to ask.

These are some basic types of pension plans:

- **Defined Benefit Plans.** The benefits you will receive are set, and the company's contributions are adjusted to match.
- **Defined Contribution Plans.** The opposite. The company's contributions are a set dollar amount or a percentage of your salary. Your benefits are determined by the amount that has accumulated in the pension fund on your behalf.
- **Profit-Sharing Plans.** The company's contribution is based on profits. Big profits, big pensions. No profits, no contributions.
- **Salary Reduction Plans.** These allow you to shelter part of your income from taxes by contributing to a company savings plan. Many companies

match employee contributions, which, along with the tax break, makes SRPs a terrific deal. Sign up. SRPs are discussed in more detail under "Tax Strategies To Meet Long-Term Financial Goals."

Pension plans often give you a choice of how to receive your retirement benefits. You may be able to take them in installments; as an annuity until you die; as an annuity that covers your spouse as well as yourself; or in a lump sum.

The methods for figuring taxes on pension distributions are too complex to explain fully here, but, if you have a choice, you should take taxes into consideration in deciding how to receive benefits.

You do not pay taxes on the portion of your benefits that you paid into a pension plan from taxable income. (You've already paid the taxes.) The remainder is usually taxable as ordinary income, although part of your benefits may qualify as long-term capital gains. If you receive a lump-sum payment, you have two attractive tax options: you can roll the payment over into an Individual Retirement Account or Keogh plan without paying taxes, or you can figure taxes by a special ten-year income averaging method. In the latter case, all of the taxes will be due in the year you receive the lump-sum payment, but you will be taxed at a much lower rate than if you received, say, \$200,000 as ordinary income in a single year. For more information, consult IRS Publication No. 575, *Tax Information on Pension and Annuity Income*.

Of more immediate concern as you are projecting your retirement budget is whether you will actually be entitled to any pension at all and, if so, how much. Most private pension plans are not "portable." That is, you cannot take your benefits with you when you change jobs. This is obviously a major concern in a mobile society, where most people change jobs several times.

If you resign or are fired, there are several things that may happen. You will receive any contributions you made to the plan, with interest. But, if you have worked for the company a relatively short time, you may lose all of the contributions the company has made on your behalf.

Under the Employee Retirement Income Security Act of 1974 (ERISA), employers who offer pension plans (they don't have to have pension plans) must extend some benefits to employees who leave the company after meeting certain requirements. This right to benefits is called "vesting." You may receive vested benefits in a lump sum when you leave the company, or you may be allowed (or required) to leave them to accumulate interest until you retire. The company, of course, will make no further contributions after you leave.

ERISA requires employers who offer pensions to meet one of these vesting requirements:

- 100% vesting after ten years.
- 25% vesting after five years, plus additional amounts until full vesting is reached in fifteen years.
- 50% vesting when your age and length of service total forty-five years,

with a minimum of five years' service. Full vesting is reached within five years thereafter.

To restate the point, the only way you can determine your retirement benefits is to ask your employer. Even then, it may be difficult to make a realistic projection, if you're relatively young and expect to change jobs several times before you retire.

The Lassiters know that Tom would receive a \$7,000 annual pension and Susan \$5,000, if they stayed with their current employers until retirement. They consider that highly unlikely, however. They decide to leave the question open for now.

Medicare

Medicare may partially replace your employer's group health insurance policy when you retire. However, Medicare may cover as little as 35% to 50% of your health care costs. You will need supplemental insurance.

Medicare is divided into two parts. Medicare A covers hospital costs, but not the cost of doctors' services in the hospital. You are entitled to Medicare A if you are eligible for Social Security benefits. (You may purchase the coverage if you are not eligible for Social Security. In 1984, the premium is \$155 a month.)

Medicare A covers hospital costs for up to ninety days. (All figures given here are for 1984; they may change.) For the first sixty days, it covers all hospital costs after a \$365 deductible per benefit period. For the next thirty days, it covers all costs except \$89 a day. Each benefit period begins when you enter the hospital and ends sixty days after you have been discharged. If you later reenter the hospital, you begin a new benefit period. You are also entitled to sixty "reserve" days of hospital coverage during your lifetime. During these days, Medicare pays for hospital costs above \$178 per day. Once you have used your sixty reserve days, they cannot be replaced.

When you sign up for Medicare A, you will automatically be enrolled in Medicare B, which covers doctors' fees and other medical costs. The premiums are currently \$14.60 a month, collected quarterly. Medicare B covers 80% of *approved* charges for medical care, after the first \$75 per year. "Approved charges" is a critical phrase. Medicare bases approved fees on charges for the previous year, so you may wind up paying considerably more than 80% of your bill.

The elderly are often gulled by hucksters of overpriced, special-purpose health insurance. Cancer insurance, for example, is probably not a good buy. Most insurance companies, including Blue Cross-Blue Shield, offer "wrap-around" or "Medigap" insurance that fills in where Medicare leaves you uncovered. By some estimates, retired people should not pay more than \$400 to \$450 a year in health insurance premiums if they are covered by Medicare. Obviously, the bill will be much higher if you have to pay \$155 a month for Medicare A.

The Lassiters' \$3,000 estimate for medical care after retirement may be too high. They decide to leave it, however. At this point, they're dealing in ballpark figures.

Putting It All Together

After reviewing your likely Social Security and pension benefits, you'll be able to make an estimate of how much you must save for retirement to meet your income goal. The procedure is very much like deciding how much life insurance you need.

Follow along with the Lassiters, doing your own calculations on your spreadsheet program, a yellow pad, or the back of an envelope. If you have an IBM, the Forecasting Module of *The Home Accountant Plus* will do many of the calculations. You can also use the charts at the beginning of the chapter.

The Lassiters figure they need a gross income of \$36,875. They expect Social Security benefits of \$12,000. Pensions might provide another \$12,000, but they are not certain what their pensions will be. They can easily speculate on the effect of various pension benefits. The calculations will be much simpler if you round numbers boldly. You'll be dealing in highly speculative figures, anyway.

	\$5,000 Pension	\$10,000 Pension	No Pension
Income goal	\$36,875	\$36,875	\$36,875
Social Security	\$12,000	\$12,000	\$12,000
Pension	\$5,000	\$10,000	
Annuities	\$0		
Other income	\$0		
Expected income	\$17,000	\$22,000	\$12,000
Deficit to be earned from investments	\$19,875	\$14,875	\$24,875
Investment required @ 3% return	\$662,500	\$495,833	\$829,167
Investment required @ 3% return, Withdrawals over 25 years	\$349,236	\$261,378	\$437,094
\$13,234 (stocks) @ 3% for 32 years	\$34,079	\$34,079	\$34,079
Shortfall	\$315,157	\$227,299	\$403,015
\$4000 per year in IRAs at 3% for 32 years	\$210,011	\$210,011	\$210,011
Additional investment needed	\$105,146	\$17,288	\$193,004

Figure 5-29: Projecting budgets far into the future is tough, no matter how you do it. Generally, however, the closer you stick to current figures, the more accurate you will be. Here, the Lassiters have calculated their retirement budget in current dollars, allowing for a real return, after inflation, of 3% on their investments. You must recalculate regularly, since the value of this year's dollars will soon be meaningless. When you do recalculate, toss out your old calculation and start over.

Figures 5-29 and 5-30 illustrate two approaches to estimating your retirement income. The first is in today's dollars and assumes a 3% rate of return on investments, after inflation. You will be projecting your investments' growth in real dollars, so the calculation already takes inflation into account. You will make adjustments for inflation, only as you update your projections. If you take this approach, you will arrive at your goal on time, but you *must* recalculate every year. Otherwise, you will wind up with a mix of 1984 and 1985 (or '85 and '86) dollars. The second approach is to estimate inflation and plan accordingly. There are two drawbacks—large ones. First, projecting inflation for any length of time can hardly be more than a wild guess. Economists can't do it; they can't even agree on the reading of the entrails. (As George Bernard Shaw said, if you laid all the economists end to end, they would not reach a conclusion.) Can you do better? As long as you revise regularly, you'll eventually get where you're going. The second disadvantage is that planning savings on the basis of inflation will distort your calculation of how much to save. As we said at the beginning of the chapter, to reach a goal of \$100,000 in today's dollars, you will have to accumulate more than \$300,000 future dollars. If you figure equal installments, the real value of your savings will be much higher in the early years than later.

With 6 percent inflation, 10% interest

	\$5,000 Pension	\$15,000 Pension	No Pension
Income goal	\$237,969	\$237,969	\$237,969
Social Security	\$77,441	\$77,441	\$77,441
Pension	\$32,267	\$96,801	
Annuities	\$0	\$0	
Other income	\$0	\$0	
Expected income	\$109,708	\$174,241	\$77,441
Deficit to be earned from investments	\$128,261	\$63,727	\$160,528
Investment required @ 10% return, 6% inflation	\$3,398,918	\$1,688,771	\$4,253,992
Investment required @ 10% return, 6% inflation, (Figured as 4% return) Withdrawals over 25 years	\$2,024,961	\$1,006,113	\$2,534,386
\$13,234 (stocks) @ 10% for 32 years	\$279,420	\$279,420	\$279,420
Shortfall	\$1,745,542	\$726,693	\$2,254,966
\$4000 per year in IRAs @ 10 % for 32 years	\$804,551	\$804,551	\$804,551
Additional investment needed	\$940,991	(\$77,858)	\$1,450,415

Figure 5-30: If you inflate your retirement budget before setting investment goals, you wind up with some pretty wild figures, subject to huge swings due to relatively minor factors. Here, for example, a modest \$15,000 pension in today's dollars estimates the need for \$1.5 million in investments.

By either method, the calculation is basically the same. You project your income needs, deduct expected Social Security and pension benefits, and calculate the investments you will need to fill the gap. These may include investments you've already made that are not designated for other purposes.

Individual Retirement Accounts and Keogh plans will be your first choice for retirement investing. Since contributions to these savings plans, and their accrued interest, are tax-deferred, state and federal governments are, in effect, contributing substantially to your retirement. Any worker may contribute up to \$2,000 a year to an IRA, and one-income couples may contribute a total of \$2,250 to separate IRAs. Self-employed people may contribute up to 20% of their income to a Keogh. You can have both. Almost any investment except collectibles is permitted. The catch is that there are heavy tax penalties if you withdraw money from either type of account before you reach 59½. You must begin making withdrawals based on your life expectancy by 70½. Despite these limitations, IRAs and Keoghs are such a good deal that you may come out ahead even if you withdraw your money and accept the penalty after seven to ten years. If you're in the 40% tax bracket and contribute \$2,000 to an IRA, \$800 of your savings—the amount you would have paid in taxes—is in effect provided by the government. IRAs and Keoghs are discussed in more detail in Chapter Eight, "Tax Strategies To Meet Specific Goals."

In their first set of calculations, shown in Figure 5-29, the Lassiters assume a 3% return on investments after inflation, but they do not project inflation. As of mid-1984, money market funds were paying about 10% and inflation was running around 4%, which yields an after-inflation return of about 5.8%. Historically, however, it has been difficult to do much better than 3%.

With no pension, Social Security will leave the Lassiters \$24,875 short of their income goal. To determine how much they would have to set aside to earn that amount without dipping into principal, they simply divide by their expected return ($\$24,875 / .03 = \$829,167$). This sum would throw off \$24,875 in interest forever. And as long as their return remained 3% after inflation, their income would automatically be adjusted to keep pace with rising prices. For example, if interest were 10%, the first 6.8 percentage points or so would go to keep their principal apace with inflation, and the number of dollars they would earn with their 3% after inflation would increase proportionally.

However, \$829,167 in today's dollars is a pretty forbidding sum. As a matter of fact, to accumulate that amount with at 3% interest (after inflation), the Lassiters would have to save more than \$16,000 a year for thirty years. (You can calculate this from the charts at the beginning of the chapter.) There's no point, really, in doing these calculations to the dollar. Round as much as you want.

Not being immortal, the Lassiters can cautiously spend part of their principal after they retire. If a \$100,000 account pays 10% interest, you can withdraw \$10,904 a year in monthly installments for twenty-five years. At 6% inflation, however, your last installment would be worth only about a quarter of the

first. (The Rule of 72 tells you that the value of a dollar is halved every twelve years at 6% inflation.) How much, then, can you withdraw to maintain a constant income in real dollars? Suppose you are earning 3% real interest, after inflation, on an account of \$100,000, and want to withdraw money in regular increments for twenty-five years. You can withdraw \$5,691 a year, or 5.7% of the initial balance, plus enough to cover inflation. You will have a steady income in real dollars for twenty-five years.

This calculation suggests that the Lassiters would come up nearly \$200,000 short, even after dedicating their mutual stock fund to retirement and depositing \$4,000 a year in their IRAs. (The \$14,000 they have in their bank money market account is their emergency fund and thus should not be counted as an investment toward retirement.) However, relatively modest pensions would diminish the gap to more manageable proportions. Another possibility, if you're seriously concerned that you might outlive your income, is to purchase a single-premium lifetime annuity when you retire. Annuities are also discussed in more detail in the section on "Tax Strategies to Meet Long-Term Goals."

Figure 5-29 is the Lassiters' calculation, based on a 10% return on investments and 6% inflation. These figures look more forbidding. One reason is that their IRA investments are limited to \$4,000 per year, even though their value will be greatly diminished by inflation. Congress might increase the maximum to compensate for inflation. If not, the Lassiters could channel investments elsewhere to make up for the difference. Even without increasing their planned IRA contributions, the Lassiters would be in good shape if they received pensions worth \$15,000 a year in today's dollars.

The Lassiters are young, and retirement is not yet at the top of their list of financial priorities. Their IRA contributions will probably be sufficient at this point. Since they expect to be in the 38% tax bracket (state and federal) for 1984, their actual annual contributions will come to a little less than \$2,500 of the \$7,500 their *Home Accountant* budget shows is available for savings. (The budget is after-tax.) By the time they're in their fifties, retirement will become a higher priority, and they will want to pursue their retirement goals more aggressively.

Work After Sixty-Five?

One way to increase your income after you reach retirement age, you may be thinking, is to continue working. Perhaps you could find a job with more personal satisfaction, even if it would pay less than you now make. Unfortunately, the financial disincentives to work after sixty-five are severe. If you've planned your retirement income adequately, the only reason to work may be that you'd rather go to the office than the golf course.

Money magazine (August 1984) calculates that a sixty-six-year-old eligible for the maximum benefit of \$8,808 per year would take home only 11% of his earnings, if he earned \$20,000; 15%, if he earned \$40,000. In *Money's* exam-

ple, the worker has a pension of \$17,000 and investment income of \$15,500. He is single and pays 19% of his income in state and federal taxes.

If you do work, these are the provisions that gobble up your earnings:

- Reduction of Social Security benefits: until you reach seventy, \$1 for every \$2 you earn above \$6,960. (That figure rises gradually to \$9,000 in 1989.) The worker in the example, who is eligible for benefits of \$8,808 in 1984, would lose all of his Social Security benefits if he earned \$23,136. (Formula: double your benefits, then add the \$6,960 exclusion.)
- Social Security taxes (FICA): 6.7% in 1984.
- State and federal income taxes: depending on your income level.
- Taxes on Social Security benefits: up to half of your benefits may be taxable. (The details are explained in the section on Social Security.)

In many cases, *Money* suggests, a person who continues working after sixty-five may come out ahead if he delays applying for Social Security benefits until he reaches seventy.

Plan Now

Planning for retirement involves many imponderables: inflation, interest, the effects of job changes on your pension, the fate of the Social Security system. These uncertainties make it impossible to plan with precision, especially if it will be any length of time before you retire. Don't worry about it. Make your best guess, and revise your plan every year. If you set goals and save regularly, you will come out ahead. As you near retirement and your planning becomes more critical, your estimates will become more accurate because of shorter time spans.

For now, the Lassiters can have their cake and brussels sprouts, too. \$2,700 is already in the budget for vacations, and they don't feel like they're scrimping elsewhere. They have estimated Susan's freelance income conservatively. In fact, they've merely written down what they normally spend. They can save \$250 a month, or \$3,000 a year, toward the BMW, put \$4,000 a year in their IRAs, and still have \$2,000 left over for other investments or unexpected expenses. Not too shabby.

Doing It Yourself

Forecasting is, by nature, approximate. As Niels Bohr, the physicist, once said, "Prediction is a very difficult art, especially when it involves the future." If you can predict the inflation rate within a percentage point—much less to a fraction of a point—for the next three years, you're considerably better at it than the president's Council of Economic Advisers and all the bankers on Wall Street put together. In fact, you could make a killing in the stock market if you could even predict with any consistency whether interest rates were generally headed up or down.

There really isn't much point in making projections to the penny when you're basing them on unpredictable rates of inflation and fluctuating inter-

est. Nevertheless, here's how compound interest works, if you want your calculations to be more accurate than the charts at the beginning of this chapter allow. The formula will also allow you to compare the effects of daily, monthly, and annual compounding. (Figure 5-1 is compounded monthly. Figures 5-8, 5-9, and 5-10 are compounded annually.)

Figuring compound interest on a lump-sum investment is not too difficult. Here's the formula:

$$FV = X (1 + i)^n$$

FV is the future value of the investment; X is the original sum; i is the interest rate for the compounding period, and n is the number of compounding periods. To figure 12% interest compounded annually on \$1,000 for three years, for example, you fill in the variables like this:

$$FV = 1,000 (1 + .12)^3$$

The answer is \$1,404.93.

For monthly compounding, the variables are 1% interest (12%/12) for 36 months. The formula is:

$$FV = 1,000 (1 + .01)^{36}$$

Answer: \$1,430.77.

To compound daily, divide the annual interest rate by 365, and multiply the number of years by 365:

$$FV = 1,000 (1 + .00033)^{1095}$$

Answer: \$1435.18. Incidentally, 12% compounded daily comes out to 12.8% per year.

The formula for figuring how much you will accumulate by making monthly (or annual) deposits of X is similar, but somewhat more complicated. X, the periodic payment, will be for the same period as the compounding period. If you compound annually, X will be the amount you contribute to your fund each year. Multiply the amount you intend to save each month by 12, before running the formula. Here it is:

$$FV = X \frac{(1 + i)^n - 1}{i}$$

The compounding period is adjusted the same way as in the simple compound interest formula. The periodic deposit will be for the same period as the compounding period.

To figure how much you must set aside each month or year (X) to reach a future goal (FG), you invert the formula:

$$X = FG \frac{i}{(1 + i)^n - 1}$$

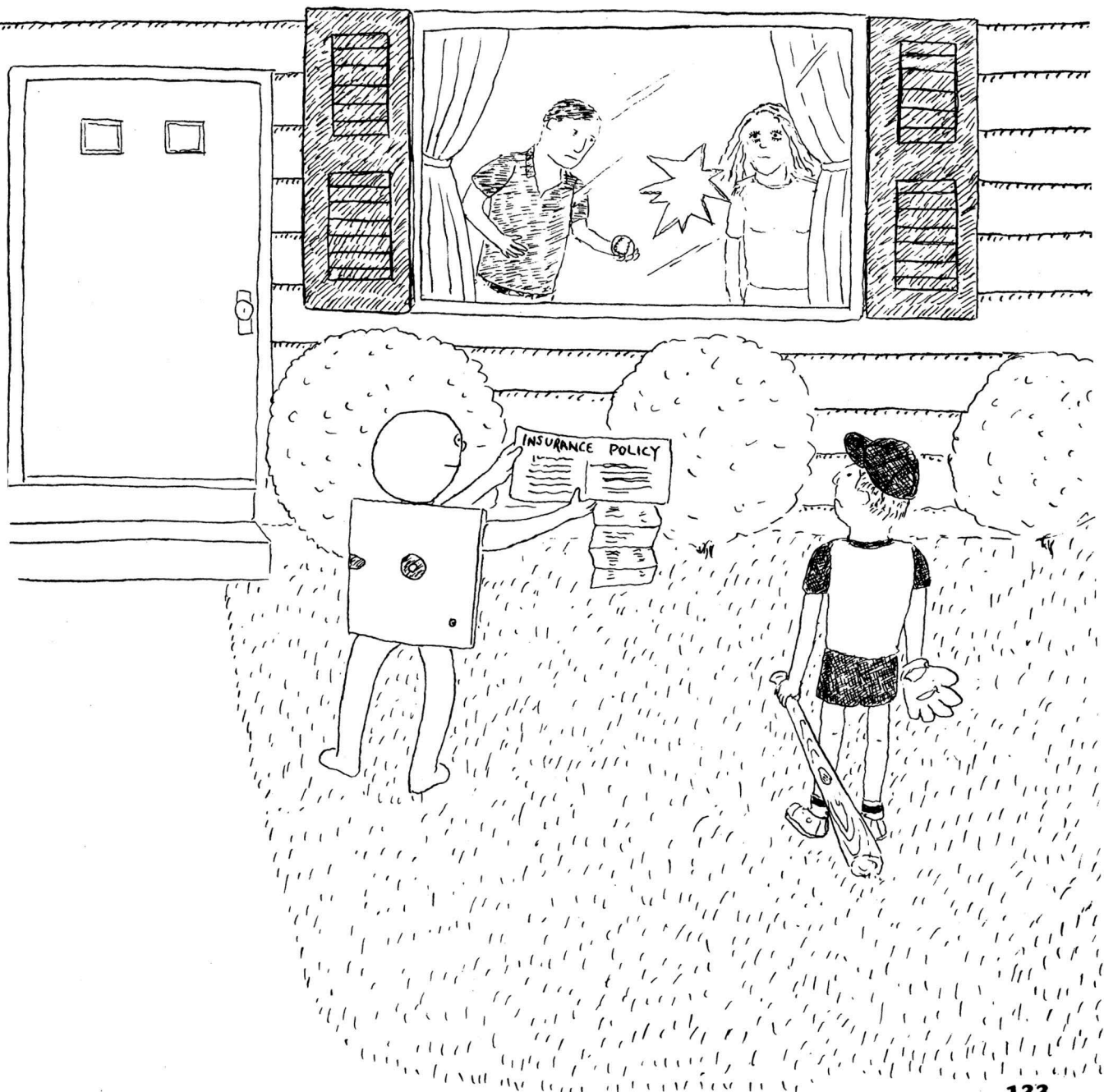
The amount you must set aside (X) will be for the same period as the compounding period. Thus, if you compound annually, X will be an annual figure; divide by 12 to get the monthly amount. If you compound monthly, X will be monthly.

Perhaps these formulas seem a little intimidating, but, if I can use them, so can you. They can be worked out on a regular pocket calculator, if you have

patience and don't need to run too many figures. (Hint: write down the formula, including brackets, with the variables filled in, before you punch it in.) They're much, much easier to do on a \$40 business calculator. And, if you're handy with a spreadsheet, you can whip off a chart in fifteen or twenty minutes. There are also other ways to run the formulas on your computer (in BASIC, for example). Your computer offers the significant advantage of displaying the calculation onscreen, so you can spot typos and other mistakes without having to punch in the whole tedious mess all over again.

Rules of Thumb

1. Rule of 72: to determine how long it will take to double your money, divide the interest rate into 72. At 10% interest, for example, your money will double in 7.2 years. This also works with inflation.
2. Real interest, after inflation, has averaged 2% to 4% historically. It's safer to use a figure in this range for long-term projections than to bank on current rates, which may be an aberration.
3. Current estimates usually suggest that it costs about \$5,000 a year to attend a state university and twice that for a private university. These are, if anything, on the low side.
4. Parents, on average, pay about 60% of their children's college costs.
5. Begin saving for college by the time your child reaches ten.
6. Apply early for financial aid. Even if you qualify, funds may run out before your application is received.
7. Allow for at least 60% to 80% of your current after-tax inflation in your retirement budget. Unless your income is quite high, even this figure may require some retrenchment.
8. Income taxes will probably consume about 20% of your gross income after retirement.
9. If you're covered by Medicare, you should not, by some estimates, spend more than \$400 to \$450 a year on health insurance premiums.



6 INSURANCE

Planning an insurance program is, in a way, much like setting financial goals. The difference is that, in setting goals, you're setting your sights as high as you think feasible; while, in planning insurance, you're thinking of getting by if the worst happens.

The two can conflict. Insurance is expensive; it consumes money you might otherwise invest to meet other financial goals. The amount of insurance you buy is partly a matter of personal preference; you must decide how much security you can afford and are willing to pay for. Many financial advisers (perhaps excluding those who are also insurance agents) recommend a fairly conservative insurance program. You should think of insurance as a means of making disaster financially survivable, not as a consolation prize.

Of the basic types of insurance, figuring the amount of life and disability insurance you need is most like setting other financial goals. You project your financial needs and provide the means for accommodating them. Health insurance is also critical to financial security in an era when a hospital bill can reach five figures in a matter of days. Auto and homeowners insurance needs are easier to calculate.*

Life Insurance

For two centuries, the life insurance industry was stodgy and unimaginative, as predictable as its actuarial tables. In essence, it offered two products. One was term insurance. You pay the premiums, and, if you die while the policy is in effect, the insurance company pays the agreed upon amount. When the term ends, the deal is over. It has no permanent value. Term insurance, naturally, gets expensive as you get older. In the eighteenth century, ordinary life insurance, also called whole life or permanent life, was invented in England to smooth out the premiums. Basically, early on, you pay far more than the actuarial tables say you should, and some of the excess collects modest interest as a savings account.

It's important to note that the original purpose of ordinary life insurance was to even out premiums, not to serve as an investment vehicle. Many

* Auto and homeowners insurance are not discussed here. Laws vary widely from state to state. Your state's minimum auto liability coverage may prove woefully inadequate if another driver is responsible for a serious injury to you or your passengers. Uninsured and *underinsured* motorist coverage is available for a few dollars a year. Buy it. Your own liability coverage protects your assets, in case you are responsible for an injury to someone else. Increasing your coverage to quite high limits also costs only a few dollars a year. Buy that, too.

advisers recommend that you buy term insurance to protect your family, while making investments separately. You should study the options and decide for yourself, but it's difficult to argue with this advice.

The actuarial tables, which predict life spans, are a jewel of precision. Until recently, there was hardly any way insurance companies could avoid making the amount of money the premium schedules were designed to produce. But the spiraling inflation and soaring interest rates of the '70s and early '80s pulled the rug from under the 4% to 6% interest rates that whole life policies offered. Because insurance companies historically have invested in long-term securities, and thus were locked into low-return investments, it was difficult for them to adapt.

Your insurance agent may argue that whole life is still a viable product, but, when interest rates are high, the marketplace says otherwise. By 1982, one whole life policy holder in ten was cashing in his policy, up from 6.6% four years earlier. The traditionally staid insurance business was in turmoil. There were upstart companies, competition, and new products that resembled investment instruments. Insurance companies were acting more and more like investment companies. "I used to say stupidity alone couldn't ruin a life company—you had to be malicious," one investment banker told *Business Week*. "That's not true anymore." Kenneth C. Nichols, president of Home Life Insurance of New York, added: "There is a big shakeout coming. We have gone from the comfort zone to the combat zone, and mediocrity can no longer survive."

Unlike banks, which are federally regulated and insured, insurance companies are regulated by the states. One of the states' principal regulatory functions is to protect policyholders by assuring the solvency of the companies. This worked well in the stodgy days of life insurance. Now, however, there are doubts whether state regulators are equal to the task, in the turmoil of the combat zone. "The way money flies around big corporations today, you'd have to be sitting at the treasurer's desk to find out what's really going on," says Jean Carlson, deputy insurance commissioner in Michigan.

Two major insurance companies already have fallen victim. In 1983, Baldwin-United filed a Chapter 11 bankruptcy after overselling single-premium deferred annuities. Charter Company, an acquisitive conglomerate, did the same after its oil distilling business went sour.

The turmoil means that it is much more important than it once was for consumers to make sure the companies they do business with are stable, and to spend more time matching policies to personal needs. The first part is relatively simple. Most public libraries have *Best's Insurance Reports*. It is a hefty tome filled with detailed financial information, investment analyses, and assessments of individual insurance companies. Much as Standard & Poor's and Moody's rate bonds, Best's rates insurance companies from A+ to D, from the policyholder's perspective. Because the long-term health of an insurance company is critical to policyholders, some advisers recommend staying away from companies rated any lower than A+.

The amount of life insurance a family needs varies greatly during the parents' lifetime. A young, two-income childless couple needs relatively little life insurance. The need peaks as they start a family, then declines as they move toward retirement and build financial security. Your insurance agent will probably argue to the contrary, but you may need little or no life insurance if no one would suffer a financial burden if you died.

Your *Home Accountant* budget and net worth statement provide you much of the information you need to make insurance decisions. The following sections first survey the types of life insurance on the market, then discuss how to determine how much insurance you need.

Term Insurance

Many financial advisers and the National Insurance Consumer Organization recommend buying term insurance to meet your insurance needs and doing your investing separately. Term insurance provides coverage during the peak at a far lower cost than whole life, and there are better investment opportunities than even the higher-yielding variations on whole life insurance.

Term insurance is the simplest and least expensive form of life insurance. Your life is insured for the duration of the policy, just as your car and house are insured for the terms of your policies on them.

Term insurance is five to six times less expensive than whole life insurance. For a thirty-five-year-old man, the annual premium for a \$75,000 whole life policy might be \$1,238, compared with an annual premium of \$240 for the same amount of term insurance. Of course, term premiums do eventually surpass whole life premiums as you grow older, but most people's insurance needs also decrease as they approach retirement and, one hopes, financial independence. Term insurance is usually not renewable past age seventy, but, if you've planned well, you won't need life insurance as a septuagenarian. Since it is unlikely that you will have employment income, what income will your spouse or other dependents lose if you should die?

Term insurance is ideally suited for large amounts of protection for young families, who have the greatest insurance need. Even if you buy some form of permanent life insurance, you will probably need to supplement it with term during that stage of your life. Term insurance simply gives you the most coverage for your premium dollar.

All term insurance is not created equal. A policy may be for one, two, five, or ten years, or it may provide coverage until you reach a certain age, with annual premiums increasing as you grow older. It is desirable for the contract to be renewable. This guarantees you the right to renew the policy at preset rates without your having to take a medical examination or otherwise demonstrate insurability. A policy may give you the right to renew a certain number of terms or until a certain age. Renewability will be particularly important if your health declines. Some policies also give you the option of

converting to a permanent insurance policy. You may have to declare your intention to convert some time before the end of the term, no later than the seventh year of a ten-year policy, for example.

Level term and decreasing term insurance are variations of the basic policy. With decreasing term, the face value of the policy declines, but the premiums remain constant. With level term, premiums and face value remain constant, but premiums are much higher in the early years than with regular term insurance. Basically, you pay the average premium for a regular term policy over the entire period. Notice that this works out great for the insurance company, since the years in which you overpay come first. Figure out whether buying a regular term policy, and investing the difference in premiums during the early years, would produce enough income to pay for the higher premiums in later years. If it will, level term is a poor choice.

Whole Life Insurance

Whole life insurance is a combination of life insurance and a low-interest savings program. The premiums and face value of the policy are locked in when you buy the policy. To accomplish this, the insurance company charges premiums far in excess of its actuarial risk in the early years of the policy. For younger people, the premium for whole life insurance may be five or six times that for the same amount of term insurance, but term premiums eventually will pass the flat premium of the whole life policy, as the likelihood of your demise inexorably increases.

Part of the excess premiums in the early years of a whole life policy accumulate to compensate the insurance company for the years when the premiums alone will not cover the company's risk. You earn a passbook-savings-like interest (and sometimes even less) on the remainder. The interest is tax-free while the policy is in force, which at least may make it more attractive than a passbook savings account. On the other hand, it's hard to think of a reason to keep more than a few hundred dollars in a passbook account.

Unfortunately, it is difficult to determine what your actual return is, because insurance companies do not separate the savings and insurance components of whole life. It is sold "bundled," to use a computer term adopted by the insurance industry. To determine the relative cost of similar policies, you can ask the company for what is known as the interest-adjusted cost index. This is based on a complicated formula that takes into account, over periods of ten or twenty years, premiums, dividends (with some policies), cash value of the policy, and interest you could earn by depositing money in a bank rather than buying the policy. The lower the cost index, the better.

As your policy accumulates cash value, you can take advantage of the asset in several ways:

- You can cash in the policy, taking the money and giving up the insurance.

- You can trade your policy for a paid-up policy for a lesser amount and pay no more premiums.
- You can convert the policy to term insurance for the length of time the cash value of your whole life policy will pay for that coverage.
- You can borrow against your policy at relatively low interest rates, historically 5% to 8% but now sometimes higher. That's considerably less than you'd pay at a bank, but then you're actually borrowing your own money. You may repay such loans at any time, or leave them outstanding indefinitely. If you do not repay the loan, principal and interest will be deducted from the benefit when you die. (The interest is tax-deductible, only if you actually pay it.) The fact that you can borrow against your life insurance at a lower rate than you can earn in a bank money market account should tell you something.

The accumulation of cash value also means that the amount of insurance you're paying for is decreasing, since the growing value of the savings component of your policy will cover part of the insurance company's loss if you should die. Thus, you may actually be buying less insurance than you think in the later years of a whole life policy, when the constant premium will be lower than the cost of comparable term insurance.

Whole life insurance is so expensive, and the return on the "savings" component is so low, that many financial advisers recommend looking elsewhere, period. The Federal Trade Commission has observed that, because of high sales commissions (often the entire first year's premium) and administrative costs, the return on your investment is actually negative for at least the first ten years of the policy. Couple that with the fact that nearly half of all policyholders decide to let their insurance lapse within the first ten years, and it's hard to find an economic justification for buying whole life insurance.

Your insurance agent will probably come up with counter-arguments. But the turmoil in the marketplace, the sudden concern over the solvency of insurance companies, and the proliferation of new types of policies suggest that the agents' arguments are getting harder and harder to sell. Some companies no longer even offer whole life, recognizing the weakness of the market.

In all, whole life insurance amounts to *paying* the insurance company to force you to save. If you're even halfway serious about financial planning, that doesn't make any sense. Of course, if you buy term and blow the savings scuba diving in Cozumel, you won't earn any interest at all. Listen to your agent, and compare options for yourself. But, if you have the self-discipline to invest the difference in premium costs, it will be hard to come out ahead with a whole life policy.

Newfangled Variations on Whole Life

The life insurance business may have been historically stodgy, but people managing billions of dollars in assets are not apt to be foolish. As consumers switched to term insurance, insurance companies began to offer alternatives to whole life in the mid-1970s. The new deals in insurance are clearly intended to combine insurance and investment. The policies are “unbundled,” so you can see how much you’re paying for what, and you may have choices as to how your money is invested.

Since these policies break down how much you’re paying for insurance and how much you’re investing, it’s easier to compare them to term insurance plus independent investments. Warnings: the insurance may be more expensive than comparable term insurance; watch out for heavy front-end commissions and administrative costs. Front-end costs may be several hundred dollars, and administrative costs may be as much as 5% to 7% of your annual premiums. Those attractive-sounding yields may not be as high as they seem.

Equitable was one of the early players in the new market. It introduced variable life in 1976. Like whole life, variable life offers fixed premiums and a minimum death benefit. Unlike whole life, the insurance and investment components of the program are clearly separated. The investment portion of the premiums is placed in a money market fund operated by the insurance company, or in your choice of instruments. The cash value of the policy may grow far more rapidly than that of a whole life policy. Carefully compare costs and returns with term insurance and alternative investments.

Universal life, another variation on whole life, was introduced by E. F. Hutton in 1979. Universal life is essentially a renewable term policy, sometimes sold with a minimum face value of \$100,000, coupled with an investment account. The premium for the insurance component of the policy rises as the policyholder ages, but the cash account allows the policyholder to change the face value of the policy, and the cash value of the policy can be juggled to increase or decrease premiums, or even to skip them. The investment funds are placed in securities with considerably higher yields than the old bonds many insurance companies still hold. Again, the premiums are “unbundled,” so the policyholder can see how much he is paying for insurance and how much is going to his cash value account.

The advertised rate of return on universal life policies may appear competitive with money market funds. Unfortunately, as with variable life, those high returns are counterbalanced by high front-end costs and administrative costs of 5% to 7% of annual premiums. The term insurance may also be more expensive than a similar policy purchased separately.

Universal life does offer more flexibility and a higher yield than traditional whole life policies, but you should compare carefully before concluding that it’s a better deal than a term policy and separate investments.

Adjustable life is another variation. It is a combination of term and permanent insurance. The advantage is that you can vary the length of the term insurance to adjust premium payments or the length of time you pay premiums. The amount of coverage can also be varied, within limits. This flexibility allows you to modify your insurance as your needs change, but adjustable life does not offer the higher yields of universal or variable life.

How Much Insurance Do You Need?

Even if whole life or one of its variants appeals to you, you may be compelled to buy term insurance, if your insurance needs are quite high. For a young professional couple with two young children, a quarter of a million dollars in life insurance may not be too much. Anything other than term would be prohibitively expensive, and they will not need insurance approaching that amount after, say, twenty years, when the kids will be financially independent.

Children impose the largest need for life insurance in most people's lives. A young single person has little need for life insurance, except perhaps a small policy to cover funeral expenses, since he probably has no dependents. After marriage, a two-income couple's insurance needs will be modest, although both spouses may want policies if the death of the other would require a significant change in lifestyle. A one-income couple will probably need a policy on the breadwinner. But with the arrival of youngsters, you must take into account not only your family's current lifestyle, but also the cost of raising the children (which will rise as they get older) and their college educations. For most people, the need for insurance will gradually decline as the children grow older, since the time they must be supported decreases. After the children become financially independent, the need for life insurance declines *sharply*, as you move toward financial independence and plan for retirement.

What you must do is match your life insurance to your personal needs. Your objective is to provide the resources for your family to live reasonably comfortably, though perhaps with some sacrifices, and to anticipate major expenses, such as the cost of sending the children to college.

Some advisers recommend buying enough insurance to meet these needs without dipping into principal. A few quick calculations may suggest that this is unrealistic. For example, even if you can earn an after-tax return of 10% on your insurance proceeds (you might be able to do it with tax-exempt bonds), insurance of \$250,000 would be required to maintain a spendable annual income of \$25,000 without spending principal. And you would have made no provision for expensive education or inflation. At thirty-five, a man might be able to purchase \$250,000 in term insurance for less than \$750 a year. How much are you willing to spend for something that will have no value, except peace of mind, unless you die? Whole life premiums for \$250,000 of coverage might approach \$4,000 a year.

The idea of leaving your family rich becomes even more far-fetched, when you realize that, historically, it has been nearly impossible to earn a *real* 10% return, after inflation. Three percent is probably more realistic. Which means that you would need something like \$833,000 in insurance coverage to provide your family with \$25,000 a year (in today's dollars) in perpetuity.

If your spouse is relatively young and employed, however, you might think of life insurance as a means of easing the transition, rather than as a replacement for all the money you would have earned during your career.

So. You might not want to buy, or be able to afford, enough insurance to allow your family to realize your dreams if you should die. However, it's relatively simple to calculate what your family will need to get by.

Since Susan's salary is larger than Tom's, the Lassiters decide to determine first whether her \$75,000 group term life insurance policy at work is sufficient. (Tom has a similar policy at work for \$50,000.)

The Lassiters break the task down into four steps. You should adapt these steps to your own situation:

- Calculate how much income the survivor will need. This is the most difficult and approximate calculation in the exercise. Possible approaches are discussed below.
- Calculate the survivor's employment income, if any. To do this, you will need to recalculate his or her taxes on current employment income. You will also need to figure the survivor's marginal tax rate to determine anticipated investment income.
- Calculate investment income available after one spouse's death. Add up current liquid assets plus life insurance benefits. Then deduct lump-sum payments the survivor will make. There will be final expenses; the average funeral costs about \$3,000. He or she might also decide to pay off a mortgage or other debts. Then simply multiply the result by the after-tax return you think the survivor can reasonably expect to earn.
- Calculate the amount of additional insurance you need. Subtract the survivor's income from the income requirement. The Lassiters will conclude that Susan does not need more insurance. But the calculation would be simple: just divide the income shortfall by the after-tax rate of return you used in step two. If the survivor needs an additional \$5,000 in income and can earn 6.5% after taxes, the calculation is: $\$5,000 / .065 = \$76,923$. (You might settle for an additional \$75,000 in insurance.)
- If you want to compensate for inflation, figure the return on your investments and insurance proceeds at 3% instead of the going rate ($\$5,000 / .03 = \$166,667$).

To calculate the amount of insurance you would need if you dipped into principal, use the chart in Figure 6-1 to determine how much you could withdraw over the period for which you will need income. (If it looks familiar, it works exactly the same way as the retirement income chart in Chapter 5.)

Annual Withdrawals From Insurance Benefit

Years Interest	5	10	15	20	25	30
1%	20.5	10.5	7.2	5.5	4.5	3.9
2%	21.0	11.0	7.7	6.1	5.1	4.4
3%	21.6	11.6	8.3	6.7	5.7	5.1
4%	22.1	12.1	8.9	7.3	6.3	5.7
5%	22.6	12.7	9.5	7.9	7.0	6.4
6%	23.2	13.3	10.1	8.6	7.7	7.2
7%	23.8	13.9	10.8	9.3	8.5	8.0
8%	24.3	14.6	11.5	10.0	9.3	8.8
9%	24.9	15.2	12.2	10.8	10.1	9.7
10%	25.5	15.9	12.9	11.6	10.9	10.5
11%	26.1	16.5	13.6	12.4	11.8	11.4
12%	26.7	17.2	14.4	13.2	12.6	12.3
15%	28.5	19.4	16.8	15.8	15.4	15.2

Figure 6-1: How much life insurance you buy will depend on whether you plan to dip into principal or to live off the interest of your insurance benefit. This chart shows what percentage of your original balance you can withdraw at various interest rates for various periods. To take inflation into account, you might figure your return at 3%, which is about the historical average, after inflation. This will allow your withdrawals to keep pace with inflation.

In oversimplified terms, your worksheet will look like this:

Survivor's after-tax income need	_____
Anticipated income	_____
After-tax employment income	_____
Projected investment income	_____
Total after-tax income	_____
Income shortfall	_____
Additional insurance needed (Shortfall divided by after-tax return on investments)	_____

The Home Accountant and *The Tax Advantage* will help you make a personal assessment of a survivor's income needs, tailored to your own situation. Accurate records of current spending will help you assess how much your family would need to maintain its lifestyle without the income—and spending—of one spouse.

If one spouse dies, the survivor's tax status will change, as well as his or her income. As noted in Chapters 7 and 8, tax effects are often critical in making financial decisions. Playing "what if" with a pencil on your tax form is a very tedious business. Changing one deduction requires you to recalculate not only Schedule A, but the entire second page of Form 1040. With *The Tax Advantage*, you can change any number, and the program will quickly recalculate the rest. In a matter of minutes, you can try several variations that

might otherwise take a couple of hours. If you also have a spreadsheet program, it will simplify your insurance planning further, but a pocket calculator and a yellow pad are adequate for the task.

As a starting point, the Lassiters pull out the *Home Accountant* Balance Sheet they worked out in Chapter 2, as well as the income, spending reports, and budget printout from Chapter 5. (You may recall that they combined their actual expenditures for the first half of the year with their tentative budget for the second half. If you have a full year's actual spending budget, use that.)

They already know that their combined employment income is \$60,800 (\$33,500 for Susan, \$27,300 for Tom) and that their after-tax income is \$43,717. According to their spending budget, they will spend \$38,816 by year's end and will save \$7,563. They also know from their balance sheet that they have \$27,234 in income-producing assets (the money market account and the XYZ Mutual Fund shares). Susan's insurance policy would add another \$75,000, bringing the total to a little more than \$102,000. (They decide to leave aside the IRAs for the time being.)

This is the basic information the Lassiters need to assess their insurance. But what does it mean?

Determining Required Income

The first question is, how much spendable income would Tom need to maintain his financial lifestyle if Susan should die?

Surveying several books of financial advice, the Lassiters find the following rules of thumb: 1) the survivor (or family) will need 75% of current gross employment income if he continues to make mortgage payments; 2) if he decides to pay off the mortgage with his spouse's death benefit, he will need 60% of gross income afterwards; 3) he will need an after-tax income equal to 75% of current after-tax employment income.

This means Tom would need 1) a gross income of \$45,600 if he does not pay off the mortgage; or 2) a gross income of \$36,480 if he does pay off the mortgage; or 3) an after-tax income of \$32,788. The Lassiters run these figures through the computer to determine how much insurance Susan would need to meet those goals if Tom could earn a 10% return on his investments. (For this calculation, they ignore inflation and assume Tom will not dip into principal. The last rule of thumb requires a recalculation of Tom's income taxes on *The Tax Advantage*.) The Lassiters find the formulas indicate: 1) Susan needs \$109,000 in additional coverage; or 2) Susan needs about \$60,000 more coverage; or 3) she needs another \$47,000 in coverage.

Conclusion: formulas are inconclusive. It's difficult to imagine a rule of thumb that would apply equally to a young family of five with a gross income of \$40,000 and a couple approaching retirement with a gross income of \$250,000.

The Lassiters' intuition is that Tom could get along fairly well on his salary if he were freed from the mortgage and car loan payments, and they are not anxious to bet a few hundred dollars a year on the off-chance that Susan might die. They decide to see how Tom would make out with no additional insurance.

Susan's \$75,000 life insurance policy would pay off the two loans with more than \$20,000 to spare. (Tom would still have to pay about \$100 a month—the portion of their \$700 payment that now goes into escrow—in real estate taxes and insurance.)

An alternative to paying off the mortgage would be to invest the insurance money and make the monthly loan payments out of the earnings. The Lassiters learn from their loan schedule that their monthly interest payments are running about \$575 a month, or \$6,900 a year. To earn that amount on the \$49,400 required to pay off the mortgage, the Lassiters' investments would have to return 14%, the same rate as the mortgage. You don't even need a calculator to figure it out. Fourteen percent of \$49,400 is \$575 a month, whether you're borrowing or investing.

You don't have to figure out the taxes, either. The taxes on the investment interest will be the same as the tax break for deducting the mortgage interest, assuming the survivor will have enough deductions left to itemize if he pays off the mortgage. If the survivor did not itemize and pay mortgage interest, the balance would be tipped further toward paying off the mortgage. As a single, Tom's zero bracket amount, or standard deduction, would be \$2,300. If he had less than that amount in deductions, he would lose some of the tax advantages of keeping the loan, since the first interest dollars he paid would be needed to put him over the zero bracket amount. Result: a higher investment rate of return would be required to make it profitable to keep the mortgage and invest the insurance money.

Whatever the interest rate on your mortgage, that's what you'd have to earn on your investments to pay the mortgage interest. However, it obviously does not make any sense to borrow money at 14% in order to invest it at the same rate. You break even, which means you receive no compensation for investment risk. If you have an old 8% mortgage, the calculation might come out differently, although some financial advisers say you should not borrow money for investments unless your after-tax earnings will be double the after-tax interest you pay on the loan.

The Lassiters decide that Tom would pay off the mortgage and Volvo loan, reducing his expenses by \$846 a month (\$600 principal and interest on the mortgage, and \$246 on the car loan).

Next, they estimate that half their remaining expenses are joint and that their personal expenditures are about equal. They deduct the house and car payments from their current after-tax employment income. Tom should be able to get along on 75% of what's left. The calculation looks like this:

Current after-tax employment income	\$43,717
Less mortgage P&I (approximate)	7,200
Less Volvo payments	2,952
Total	33,565
Times 75%	.75
Survivor's after-tax income requirement	\$25,174

The Lassiters now have a number for Tom's income requirement. It's still a seat-of-the-pants estimate, since they arrived at the formula by intuition. Their *Home Accountant* budget provides a second method of estimating Tom's expenses. In Figure 6-2, the Lassiters have compared their current expenditures, taken from the right column of their budget, with their best guess at what Tom would spend if he were alone. The mortgage payment would be reduced to the \$100 a month Tom would pay in taxes and insurance; the Volvo loan would be eliminated; utilities would remain unchanged; there would be fewer long-distance calls; they budget \$50 a week for food; and so forth. Tom's estimated expenses come to \$21,238, but they want Tom to be able to continue saving 10 % of his after-tax income. (Remember, pay yourself first.) To arrive at this figure, they divide total expenditures by 9. (If Tom saves 10%, the expenditures will be 9/10 of his budget; savings will be the remaining tenth.)

The answer is \$23,598, not too far from their earlier estimate of \$25,174. Both figures are speculative, and the Lassiters think their budget for the second half of 1984 may be on the conservative side. But \$24,000 or \$25,000 seems to be in the right ballpark. They decide to go with \$24,000 and make a Kentucky windage* adjustment.

Category	Current	Proposed
MORTGAGE	8,400	1,200
VOLVO LOAN	2,952	0
UTILITIES	2,110	2,110
TELEPHONE	1,507	1,000
FOOD	3,211	2,500
DOCTORS ETC/T	2,967	2,967
CLOTHES	2,110	1,000
CAR EXPENSES	1,552	1,000
HOME REPAIRS	1,361	1,361
PUBLICATIONS	554	100
ENTERTAINMENT	1,438	1,000
DINING OUT	985	1,000
VACATIONS	2,734	1,000
FURNISHINGS	1,508	1,000
MISCELLANEOUS	5,427	4,000
TOTAL	38,816	21,238
SAVINGS	7,563	2,360
	46,379	23,598

Figure 6-2: Using a *Home Accountant* budget to calculate insurance needs. Here, the Lassiters figure Tom would need \$21,238 to cover expenditures and \$2,360 for savings. They have assumed he would pay off the mortgage, leaving \$100 a month for taxes, insurance, and their car loan.

* "Kentucky windage," if you want to know, is a marksman's term. A marksman's rifle has a lateral adjustment on the sight to compensate for wind, or just for inaccuracy to the left or right. The Kentucky method is simply to aim a bit upwind.

These calculations would come out quite differently, of course, if the Lassiters had children. Providing insurance to cover the cost of raising and educating children will be discussed later.

The Survivor's Employment Income

Would Tom's after-tax income meet his needs if Susan died? He knows his income is \$27,300. But his tax status would change dramatically if Susan died. He would be single (if you have children, a survivor would be a qualifying widow or widower for two years, then a head of household); he would lose the deduction for the mortgage interest, and his marginal tax rate would change, altering his after-tax return on investments.

The Lassiters decide to figure Tom's taxes as a single, based on the assumption he would decide to pay off the mortgage. They also exclude investment income. They will estimate investment separately, taking into account Tom's projected marginal tax rate. They also exclude payments to Tom's IRA, since he might decide to delay further deposits. (If Susan died, Tom would have the choice of taking the money from Susan's IRA or rolling it over into his own.)

Figures 6-3 and 6-4 show how Tom's federal taxes would have come out, had he been single, without a mortgage, in 1983. His itemized deductions on Schedule A would have been pared down to \$913, after subtracting the standard deduction. His taxes would have come to \$4,949. (It's a simple matter to figure his taxes the other way, on the assumption he would choose not to pay off the mortgage. His taxes come to \$2,984, a little under \$2,000 less.) *The Tax Advantage's* T-tax feature tells them that his marginal tax rate would have been 32%. His Maryland income tax would be about \$1,175. He will also have to pay Social Security tax (7% of gross income is close enough) of \$1,911. Social Security taxes, remember, have been deducted from their current after-tax employment income.

Since they now have Tom's taxable income, \$25,387, they can recalculate his taxes from the new tax tables (Figure 6-5), taking into account the 1984 tax reductions. Under the 1984 rates, his taxes would be \$4,681, and his tax bracket would be 30%. (This step is not really necessary, since what follows is a fairly quick and dirty calculation, anyway.) Adding 5% Maryland income tax, they find that his effective tax bracket for investment purposes would be 35%.

If you would be eligible for Social Security survivor's benefits or other payments because of your spouse's death (Tom would not), you should include those amounts in your calculations of the survivor's income.

The calculation of Tom's prospective income without Susan looks like this:

Survivor's gross income	\$27,000
Less federal tax	4,681
Less state tax	1,175
Less Social Security tax	1,911

After-tax employment income	\$19,533
Social Security or other benefits	0
Other non-investment income	0
After-tax income	<u>\$19,533</u>

THOMAS L. LASSITER

*** SCHEDULE A - ITEMIZED DEDUCTIONS 1983 ***

THOMAS L. LASSITER

SSN:444-55-6666

> MEDICAL & DENTAL <

1	MEDICINES & DRUGS	1	0
2	1% 1040 LINE 33.	2	273
3	SUBTRACT.	3	0
4A	DOCTORS ETC.	4A	2,460 I
4B	TRANSPORTATION.	4B	0
4C	OTHER MEDICAL	4C	0
5	ADD	5	2,460
6	5% 1040 LINE 33.	6	1,365
7	SUBTRACT.	7	1,095

> TAXES <

8	STATE & LOCAL INCOME.	8	1,175
9	REAL ESTATE	9	734
10A	GENERAL SALES	10A	209
10B	MOTOR VEHICLES.	10B	0
11	OTHER TAXES	11	0
12	ADD	12	2,118

> INTEREST EXPENSE <

13A	HOME MORTGAGE INST.	13A	0
13B	HOME MORTGAGE INDV.	13B	0
14	CREDIT CARDS.	14	0
15	OTHER INTEREST EXP.	15	0
16	ADD	16	0

> CONTRIBUTIONS <

17A	CASH CONTRIBUTIONS.	17A	0
17B	CASH OVER \$3000	17B	0
18	OTHER THAN CASH	18	0
19	CARRYOVER	19	0
20	ADD	20	0

> CASUALTY AND THEFT <

21	CASUALTY OR THEFT	21	0
----	-----------------------------	----	---

> MISCELLANEOUS <

22	DUES.	22	0
23	TAX RETURN PREP. FEE.	23	0
24	OTHER DEDUCTIONS.	24	0
25	ADD	25	0

> SUMMARY <

26	ADD	26	3,213
27	STANDARD DEDUCT.	27	2,300
28	TOTAL DEDUCTION	28	913

Figure 6-3: Tom Lassiter's Schedule A as a single. Paying off the mortgage would reduce his deductions to \$913.

THOMAS L. LASSITER

*** FORM 1040 U.S. INDIVIDUAL INCOME TAX RETURN 1983 ***

THOMAS L. LASSITER

SSN:444-55-6666

505 LAKESHORE DR.
HAGERSTOWN, MD 55555

YOUR OCCUPATION : PRINCIPAL
> FILING STATUS <

1. ☒ SINGLE
2. ☐ MARRIED FILING JOINT RETURN
3. ☐ MARRIED FILING SEPARATE RETURN
4. ☐ HEAD OF HOUSEHOLD
5. ☐ QUALIFYING WIDOW(ER)

> EXEMPTIONS <

- 6A ☒ YOURSELF ☐ 65 OR OVER ☐ BLIND NUMBER CHECKED
6B ☐ SPOUSE ☐ 65 OR OVER ☐ BLIND ON 6A AND B. . [1]
6C NUMBER OF YOUR DEPENDENT CHILDREN WHO LIVED WITH YOU [0]
6D NUMBER OF OTHER DEPENDENTS [0]
6E TOTAL NUMBER OF EXEMPTIONS CLAIMED [1]

> INCOME <

7	WAGES	7	27,300	I
8	INTEREST INCOME [B]	8	0	X
9A	DIVIDENDS [B]	9A	0	X
9B	EXCLUSION	9B	0	
9C	SUBTRACT	9C	0	
10	TAX REFUNDS	10	0	X
11	ALIMONY RECEIVED	11	0	
12	BUSINESS [C]	12	0	X
13	CAPITAL GAIN [D]	13	0	
14	40% CAP. GAIN DISTR.	14	0	
15	SUPPLEMENTAL GAINS	15	0	
16	FULLY TAXABLE PENS.	16	0	
17A	OTHER PENSIONS	17A	0	
17B	TAXABLE AMOUNT	17B	0	
18	SUPPLEMNT. INCOME [E]	18	0	
19	FARM INCOME	19	0	
20A	UNEMPLOYMENT COMPEN.	20A	0	
20B	TAXABLE AMOUNT	20B	0	
21	OTHER INCOME	21	0	
22	TOTAL INCOME	22	27,300	

> ADJUST. TO INCOME <

23	MOVING EXPENSE	23	0	
24	EMPLY. BUS. EXP.	24	0	
25A	IRA	25A	0	
25B	PAYMENTS IN 1984	25B	0	
26	KEOGH	26	0	
27	INTEREST PENALTY	27	0	
28	ALIMONY PAID	28	0	
29	MARRIED COUPLE [W]	29	0	X

30	DISABILITY EXCLUS.	30	0	
31	TOTAL ADJUSTMENTS	31	0	

> ADJUST. GROSS INCOME <

32	ADJUSTED GROSS	32	27,300	
----	--------------------------	----	--------	--

> TAX COMPUTATION <

33	FROM LINE 32	33	27,300	
34A	DEDUCTIONS [A]	34A	913	I
34B	ALLOW. CHAR. CONTR.	34B	0	

Figure 6-4 continues next page

35	SUBTRACT.	35	26,387
36	EXEMPTIONS * \$1000.	36	1,000
37	TAXABLE INCOME.	37	25,387
	INCOME AVERAGE [G].		
38	TAX	38	4,949 T
39	ADDITIONAL TAXES.	39	0
40	TOTAL	40	4,949
> CREDITS <			
41	ELDERLY	41	0
42	FOREIGN TAX	42	0
43	INVESTMENT.	43	0
44	POLITICAL CONTRIB.. . . .	44	0
45	DEPENDENT CARE.	45	0
46	JOBS CREDIT	46	0
47	RESIDENTIAL ENERGY.	47	0
48	TOTAL CREDITS	48	0
49	BALANCE	49	4,949
> OTHER TAXES <			
50	SELF EMPLOYMENT [SE].	50	0
51	ALT. MINIMUM TAX.	51	0
52	RECAP.INVEST.CREDIT	52	0
53	SOC. SEC. TAX ON TIP.	53	0
54	UNCOLL. TAXES ON TIP.	54	0
55	IRA	55	0
56	TOTAL TAX	56	4,949
> PAYMENTS <			
57	FED. TAX WITHHELD	57	0
58	ESTIMATED TAX PAYM.	58	0
59	EARNED INCOME CREDIT.	59	0
60	FORM 4868	60	0
61	EXCESS FICA & RRTA.	61	0
62	CRDT.FOR TAX ON FUEL.	62	0
63	REG. INVEST. CO..	63	0
64	TOTAL	64	0
65	* OVERPAID *.	65	0
66	REFUNDED TO YOU	66	0
67	APPLIED TO 1984	67	0
68	* AMOUNT YOU OWE *.	68	4,949

Figure 6-4: At 1983 tax rates, Tom Lassiter's income taxes as a single without a mortgage would come to \$4,949.

1984 Tax Rate Schedules

Caution: Do not use these Tax Rate Schedules to figure your 1983 taxes. Use only to figure your 1984 estimated taxes.

SCHEDULE X—Single Taxpayers				SCHEDULE Z—Heads of Household			
If line 5 is:		The tax is:	of the amount over—	If line 5 is:		The tax is:	of the amount over—
Over—	but not over—			Over—	but not over—		
\$0	\$2,300	—0—		\$0	\$2,300	—0—	
2,300	3,400	11%	\$2,300	2,300	4,400	11%	\$2,300
3,400	4,400	\$121 + 12%	3,400	4,400	6,500	\$231 + 12%	4,400
4,400	6,500	241 + 14%	4,400	6,500	8,700	483 + 14%	6,500
6,500	8,500	535 + 15%	6,500	8,700	11,800	791 + 17%	8,700
8,500	10,800	835 + 16%	8,500	11,800	15,000	1,318 + 18%	11,800
10,800	12,900	1,203 + 18%	10,800	15,000	18,200	1,894 + 20%	15,000
12,900	15,000	1,581 + 20%	12,900	18,200	23,500	2,534 + 24%	18,200
15,000	18,200	2,001 + 23%	15,000	23,500	28,800	3,806 + 28%	23,500
18,200	23,500	2,737 + 26%	18,200	28,800	34,100	5,290 + 32%	28,800
23,500	28,800	4,115 + 30%	23,500	34,100	44,700	6,986 + 35%	34,100
28,800	34,100	5,705 + 34%	28,800	44,700	60,600	10,696 + 42%	44,700
34,100	41,500	7,507 + 38%	34,100	60,600	81,800	17,374 + 45%	60,600
41,500	55,300	10,319 + 42%	41,500	81,800	108,300	26,914 + 48%	81,800
55,300	81,800	16,115 + 48%	55,300	108,300	-----	39,634 + 50%	108,300
81,800	-----	28,835 + 50%	81,800				

SCHEDULE Y—Married Taxpayers and Qualifying Widows and Widowers				Married Filing Separate Returns			
If line 5 is:		The tax is:	of the amount over—	If line 5 is:		The tax is:	of the amount over—
Over—	but not over—			Over—	but not over—		
\$0	\$3,400	—0—		\$0	\$1,700	—0—	
3,400	5,500	11%	\$3,400	1,700	2,750	11%	\$1,700
5,500	7,600	\$231 + 12%	5,500	2,750	3,800	\$115.50 + 12%	2,750
7,600	11,900	483 + 14%	7,600	3,800	5,950	241.50 + 14%	3,800
11,900	16,000	1,085 + 16%	11,900	5,950	8,000	542.50 + 16%	5,950
16,000	20,200	1,741 + 18%	16,000	8,000	10,100	870.50 + 18%	8,000
20,200	24,600	2,497 + 22%	20,200	10,100	12,300	1,248.50 + 22%	10,100
24,600	29,900	3,465 + 25%	24,600	12,300	14,950	1,732.50 + 25%	12,300
29,900	35,200	4,790 + 28%	29,900	14,950	17,600	2,395.00 + 28%	14,950
35,200	45,800	6,274 + 33%	35,200	17,600	22,900	3,137.00 + 33%	17,600
45,800	60,000	9,772 + 38%	45,800	22,900	30,000	4,886.00 + 38%	22,900
60,000	85,600	15,168 + 42%	60,000	30,000	42,800	7,584.00 + 42%	30,000
85,600	109,400	25,920 + 45%	85,600	42,800	54,700	12,960.00 + 45%	42,800
109,400	162,400	36,630 + 49%	109,400	54,700	81,200	18,315.00 + 49%	54,700
162,400	-----	62,600 + 50%	162,400	81,200	-----	31,300.00 + 50%	81,200

Figure 6-5: You can use these 1984 tax tables to calculate your tax, if you do not use *The Tax Advantage*. The Lassiters find that Tom's marginal federal tax rate would be 30%, compared to 32% under the 1983 tables.

Investment Income

Tom undoubtedly could get by on an after-tax income of \$19,533, by cutting back or moving to a smaller house, but wouldn't have to. The Lassiters are already earning a return on \$27,234 in their money market account and the mutual fund. Susan's life insurance benefit would add another \$75,000, although Tom would use more than two-thirds of that to pay off the mortgage and the Volvo loan.

To estimate Tom's prospective investment income, the Lassiters add up his available liquid assets and subtract his lump-sum expenditures after Susan's death. They figure he could earn a 10% before-tax return on investments. Since his state and federal tax bracket would be 35%, his effective yield on a 10% before-tax return would be 6.5%.

Here's their calculation:

LIQUID ASSETS

XYZ Mutual Fund	\$13,234	
Money market account	\$14,000	
Life insurance benefit	<u>\$75,000</u>	
Investment assets		\$102,234

FINAL EXPENSES

Funeral	\$3,000	
Uninsured medical costs	0	
Administrative costs	0	
Estate taxes	0	
Total		\$3,000

LIABILITIES

Mortgage	\$49,419	
Volvo loan	<u>5,122</u>	
Total		<u>\$54,541</u>
Lump-sum expenditures		\$57,541
Available for investment		<u>\$44,693</u>
After-tax return @ 10% (6.5% after tax)		\$2,905

The Final Calculation

The final step is to determine whether Susan's insurance coverage is adequate and, if not, how much more coverage she needs. To do this, they subtract Tom's after-tax employment and investment income from his income requirement, then divide by his anticipated after-tax return on his investment. The bottom line is the amount of additional coverage Susan needs.

The calculation:

Survivor's income requirement		\$24,000
Survivor's earned income	\$19,533	
Investment income	<u>2,905</u>	
Survivor's after-tax income		<u>\$22,438</u>
Shortfall to be earned from insurance benefit		\$1,562
Additional insurance required (Shortfall/.065)		\$24,030

To meet the shortfall, Susan might buy another \$25,000 in insurance. Fifteen hundred dollars is not an intimidating sum, however, and Tom could get by without additional insurance. Figure 6-6 summarizes the entire calculation. To recalculate for inflation, you need only modify the final steps to figure the return on investment and insurance requirement based on a 3 % rate of return. (See Figure 6-7.) For the Lassiters, this produces a whopping insurance requirement of \$104,207 to yield a mere \$3,126 in income.

INCOME REQUIREMENT		
Current after-tax employment income	\$43,717	
Less mortgage P&I (approximate)	7,200	
Less Volvo payments	2,952	
	<hr/>	
Adjusted after-tax income requirement	33,565	
X 75%	.75	
	<hr/>	
After-tax income required	25,174	
Kentucky windage adjustment	\$24,000	
CURRENT INCOME		
Survivor's gross income	\$27,300	
Less federal tax	4,681	
Less state tax	1,175	
Less Social Security tax	1,911	
	<hr/>	
After-tax employment income	19,533	
Social Security or other benefits	0	
Other non-investment income	0	
	<hr/>	
After-tax income	\$19,533	
INVESTMENT INCOME		
Liquid Assets		
XYZ Mutual Fund	\$13,234	
Money market account	14,000	
Life insurance benefit	75,000	
	<hr/>	
Investment assets		\$102,234
Final Expenses		
Funeral	\$3,000	
Uninsured medical costs	0	
Administrative fees	0	
Estate taxes	0	
	<hr/>	
		\$3,000
Liabilities		
Mortgage	\$49,419	
Volvo loan	5,122	
	<hr/>	
		\$54,541
Lump sum expenditures		\$57,541
		<hr/>
Available for investment		44,693
After-tax return @ 10% (6.5% after tax)		\$2,905
FINAL CALCULATION		
Survivor's required income		\$24,000
Survivor's earned income	19,533	
Investment income	2,905	
	<hr/>	
Survivor's after-tax income		22,438
		<hr/>
Shortfall to be earned from additional insurance		\$1,562
Additional insurance required (Shortfall / .065)		\$24,030

Figure 6-6: Calculating your life insurance needs is not really as complicated as it looks. It's simply a matter of figuring your income requirement, then deducting employment income and investment income. The difference is the amount you must earn from your insurance benefit. If you want to live off the interest, the final calculation is a simple matter of dividing your shortfall by your anticipated return on investment, as the Lassiters have done here. Since the Lassiters figure Tom can get by without additional insurance, they have not calculated how much he would need if he gradually spent the principal on his investments.

RECALCULATING FOR INFLATION

Available for investment	44,693
After-tax return @ 3%	1,341

FINAL CALCULATION

Survivor's required income		\$24,000
Survivor's earned income	19,533	
Investment income	1,341	

Survivor's after-tax income		20,874

Shortfall to be earned from additional insurance		\$3,126
Additional insurance required (Shortfall/.03)		\$104,207

Figure 6-7: To take inflation into account in your life insurance calculation, you need only to adjust the rate of return on investments. Historically, a 3% return, after inflation, has been the norm. If you're earning 10%, the rest of your earnings go to keeping up with inflation.

Still, the Lassiters can get by without additional insurance on Susan. Tom might want to have more income (who wouldn't?), but he would be able to keep the house and live reasonably comfortably. If Susan died, Tom's income would be close to what they figure he needs. The \$3,000 raise he is expecting in the fall, in fact, would cover the projected shortfall. Moreover, their calculation is approximate, and it is statistically quite unlikely that Susan will die in the coming year.

Children

The calculation would be entirely different with a child in the family. Suppose the Lassiters have a new baby, and Susan is just returning to work. The Lassiters' insurance needs would be dramatically higher. Susan's death would not reduce the family's spending by as much, proportionally, as if they were childless. In fact, Tom's expenditures might actually increase, since he would have to provide daycare, which is not in the Lassiters' current budget. Neither does their budget now include the costs of feeding, clothing, and providing medical care for a youngster. The Lassiters would also have to provide for the child's college education in the absence of Susan's income. On the other hand, Tom's status as a single parent would reduce his tax rate. In this section, the Lassiters recalculate Susan's life insurance needs on the assumption a child has just arrived.

Children are definitely expensive. Assuming an 8% inflation rate and a moderate standard of living, a child born in 1979 will cost \$134,414 by the age of seventeen, according to the U.S. Department of Agriculture. (See Figure 6-8.) That's an average of nearly \$8,000 a year, although, in later years, when the cost appears highest, the expenses will be paid in inflated dollars. The average cost would be only about \$4,000 in 1979 dollars. For a single parent, however, day care would put the annual cost far above average in the early years.

TABLE 1: Current dollar estimates of cost of raising a child born in 1960 and in 1979 at the moderate cost level in the urban North Central region.

Year	Age of child (years)	Total	Food at home	Food away from home	Clothing	Housing	Medical care	Education	Transportation	Other
COST OF RAISING A CHILD BORN IN 1960										
1960	Under 1	\$1,205	\$173	0	\$62	\$501	\$59	0	\$246	\$164
1961	1	1,259	215	0	62	505	61	0	249	167
1962	2	1,203	216	0	102	447	62	0	222	154
1963	3	1,217	219	0	103	452	64	0	223	156
1964	4	1,303	254	\$37	104	458	65	0	226	159
1965	5	1,323	260	38	105	463	67	0	230	160
1966	6	1,429	265	40	149	449	70	\$34	233	189
1967	7	1,529	326	42	155	463	75	35	239	194
1968	8	1,591	336	44	163	482	79	37	247	203
1969	9	1,677	352	47	173	513	85	38	257	212
1970	10	1,840	440	50	180	550	90	40	270	220
1971	11	1,916	451	53	186	575	96	42	284	229
1972	12	2,138	481	66	274	620	99	43	309	246
1973	13	2,344	622	71	284	647	103	44	318	255
1974	14	2,609	714	80	305	722	112	47	354	275
1975	15	2,843	773	87	319	800	126	51	387	300
1976	16	3,319	884	93	458	879	138	53	470	344
1977	17	3,529	937	100	478	941	151	56	503	363
TOTAL 1960-77		34,274	7,918	848	3,662	10,467	1,602	520	5,267	3,990
COST OF RAISING A CHILD BORN IN 1979										
1979	Under 1	\$2,972	\$450	0	\$115	\$1,263	\$179	0	\$585	\$380
1980	1	3,319	596	0	124	1,364	193	0	632	410
1981	2	3,361	644	0	217	1,295	209	0	595	401
1982	3	3,627	695	0	234	1,398	224	0	642	433
1983	4	4,171	863	\$139	253	1,510	244	0	694	468
1984	5	4,503	932	150	273	1,631	263	0	749	505
1985	6	5,060	974	162	409	1,669	284	\$121	809	632
1986	7	5,710	1,297	175	442	1,803	307	130	874	682
1987	8	6,168	1,401	189	478	1,947	331	141	944	737
1988	9	6,661	1,513	204	516	2,103	358	152	1,019	796
1989	10	7,501	1,943	220	557	2,271	386	164	1,101	859
1990	11	8,102	2,098	238	602	2,453	417	177	1,189	928
1991	12	9,378	2,317	307	939	2,745	451	191	1,380	1,048
1992	13	10,407	2,782	332	1,014	2,964	487	207	1,490	1,131
1993	14	11,242	3,005	358	1,096	3,202	526	223	1,610	1,222
1994	15	12,140	3,245	387	1,183	3,458	568	241	1,738	1,320
1995	16	14,468	3,923	418	1,768	3,868	613	260	2,069	1,549
1996	17	15,624	4,237	451	1,909	4,177	662	281	2,235	1,672
TOTAL 1979-96		134,414	32,915	3,730	12,129	41,121	6,703	2,288	20,355	15,173

Note: Table assumes child is the family of a husband and wife with no more than five children. Prices are current in the years specified, rounded to the nearest \$1; future prices are inflated from 1979 constant dollar estimates at an annual rate of 8 percent, rounded to nearest \$1.

(Source: United States Department of Agriculture)

Figure 6-8: Raising a youngster born in 1979 will cost more than \$134,000 if inflation averages 8% a year, according to this calculation by the U.S. Department of Agriculture. That's nearly four times the cost of raising a child born in 1960. Actually, however, the figure is not as forbidding as it seems. In eighteen years, the period covered here, 8% inflation would cut the value of a dollar to 25 cents. By this calculation, the real cost of maintaining the youngster at age 17 will be only about one-third more than the first year.

For college, figure at least \$20,000 in today's dollars for four years at a public university and twice that for a private school. Published estimates vary considerably. Even if you would prefer to give the child the option of going to private school, you might consider providing insurance for only the cost of a public university. You are, after all, planning for a worst-case, against-the-odds scenario. If you set aside enough life insurance now to cover the current cost of education, you can ignore inflation. The interest the college account earns should keep pace with inflation. (You may want to shelter the account from taxes by placing it in a trust for the child, so that it will be taxed at his low tax rate. See Chapter 8.)

The older your children are, the less difficult the calculation of your insurance needs. You will have experience with their spending habits and the amount required to cover their basic needs. The time until their financial independence will be shorter, so you will not have to plan so far into the unforeseeable future. Since you will face less long-term uncertainty, you might be more willing to use up part of the principal set aside for child support. This may significantly reduce the amount of insurance you need.

Taking all of this into account, the Lassiters recalculate Susan's life insurance needs in Figure 6-9. Here's a summary of adjustments in their earlier calculation:

Current after-tax employment income	\$43,717
Less mortgage P&I (approximate)	7,200
Less Volvo payments	2,952
Adjusted after-tax income	33,565
requirement	
X 75%	.75
After-tax income required	25,174
Kentucky windage adjustment	\$24,000
Daycare	5,000
Other child expenses	4,000
Total after-tax income required	33,000

CURRENT INCOME

Survivor's gross income	\$27,300
Less federal tax	4,054
Less state tax	1,100
Less Social Security tax	1,911
After-tax employment income	20,235
Social Security or other benefits	0
Other non-investment income	0
After-tax income	\$20,235

INVESTMENT INCOME

Liquid Assets

XYZ Mutual Fund	\$13,234
Money market account	14,000
Life insurance benefit	75,000

Investment assets

\$102,234

Final Expenses		
Funeral	\$3,000	
Uninsured medical costs	0	
Administrative fees	0	
Estate taxes	0	
	-----	\$3,000
Liabilities		
Mortgage	\$49,419	
Volvo loan	5,122	
	-----	\$54,541
College fund		25,000
File: kidinsure		

Lump sum expenditures		\$82,541

Available for investment		19,693
After-tax return @ 10% (6.7% after tax)		\$1,319
FINAL CALCULATION		
Survivor's required income		33,000
Survivor's earned income	20,235	
Investment income	1,319	

Survivor's after-tax income		21,554

Shortfall to be earned from additional insurance		\$11,446
Additional insurance required (Shortfall/.067)		\$170,829
Insurance required withdrawing 9.3% principal for 20 years (Shortfall/.093)		123,071
Policy required to withdraw \$9,300 per year for 20 years (\$9,300/.093)		100,000
At age 11, withdrawing 13.9% principal for 10 years (Shortfall/.139)		82,342

Figure 6-9: A child would increase Tom Lassiter's budget as a widower to \$33,000. To meet that need and to provide a \$25,000 college fund, Susan would need more than \$170,000 in additional insurance. However, Tom could withdraw \$11,445 a year for twenty years (9.3% of the original principal), if the fund were earning 7% interest after taxes. A \$100,000 insurance fund would yield \$9,300 a year for twenty years. If the child were eleven, a fund of \$82,342 would yield the same amount for ten years, until the child was twenty-one.

- **Income Requirement.** Tom's basic income needs are unchanged, but they add \$5,000 a year for daycare and \$4,000 for basic support (a rough guess for the next five years, based on Figure 6-8). They figure the child's support requirements will grow as the need for daycare diminishes. Tom's after-tax income need is now \$33,000.
- **Current Income.** Susan's death would alter Tom's tax status and his marginal tax rate. Since he would be supporting a child, he would be a qualifying widower and pay taxes at the joint return rate, for the two years following her death. (He would file a joint return the year Susan died.)

Thereafter, he would be classified as a head of household and taxed more than a couple, but less than a single. The recalculation is quickly made by changing Taxpayer Information on *The Tax Advantage*. The Lassiters decide to budget for status as head of household. As of 1984, Tom's taxes as a head of household with one dependent would be \$4,054. His marginal tax rate would be 33% (28% federal, 5% state). His state taxes would also be reduced slightly by the addition of a dependent.

- **Investment Income.** Current assets available for investment are sharply reduced by the provision of \$25,000 for a college fund. Because of his lower tax rate, however, Tom will be able to earn a slightly higher after-tax return.
- **The Final Calculation.** Susan will need additional insurance of more than \$170,000 to provide for the family's projected needs without dipping into principal.

However, Figure 6-1 shows that you can withdraw 9.3% of your initial principal for twenty years if your investment account is earning 7% after taxes. Additional insurance of about \$127,000 would provide Tom with about \$9,000 a year to support the child until age twenty, when the insurance fund would be exhausted. An additional \$100,000 would provide \$9,300 a year (approximately the Lassiters' estimated cost of supporting the child) until the youngster reached age twenty. If the child were older, Tom would be able to withdraw money from the account more rapidly, since it would be a shorter time until the child was financially independent. If the child were eleven, for example, an insurance fund of \$81,754 would allow him to withdraw \$11,445 a year for ten years, until the child reached twenty-one.

RECALCULATING FOR INFLATION

Available for investment	19,693
After-tax return @ 3%	591
FINAL CALCULATION	
Survivor's required income	33,000
Survivor's earned income	20,235
Investment income	591

Survivor's after-tax income	20,826

Shortfall to be earned from additional insurance	\$12,174
Additional insurance required (Shortfall/.03)	\$405,807
Insurance required withdrawing 6.7% principal for 20 years (Shortfall/.067)	181,705
Policy required to withdraw \$9,300 per year for 20 years (\$9,300/.067)	138,806
At age 11, withdrawing 11.6% principal for 10 years (Shortfall/.116)	104,950

Figure 6-10: Figuring a 3% return on investment to accommodate inflation, the arrival of a child would raise Susan's life insurance shortage to \$405,000, if Tom planned not to dip into principal; \$181,705, if he did. A fund of \$138,806 would yield \$9,300 per year for twenty years; a fund of \$104,950, more than \$12,000 a year for ten.

Once again, recalculating the final steps for a 3% return on investments will help you adjust your insurance plans for inflation. In Figure 6-10, the Lassiters find that, to accommodate inflation, Susan would need an additional \$406,000 in insurance, if Tom did not plan to withdraw principal; another \$182,000 in coverage to provide a little more than \$12,000 a year for twenty years; or another \$139,000 to provide \$9,300 a year for twenty years. A fund of \$105,000 would provide about \$12,000 a year for ten years.

Adapting the Lassiters' Calculations to Your Situation

The principal difficulty in assessing your life insurance program is figuring how much income your family will need if you die. Once you have done that, it is relatively simple to calculate how much insurance is required to meet that need.

Two-thirds to three-quarters of your family's current after-tax income, plus a provision for the children's education expenses and other foreseeable major costs, is probably a reasonable objective. Your *Home Accountant* budget will help you refine your projected income needs.

Finally, however, the amount of life insurance you choose to buy is largely a personal decision. Your computer cannot measure your optimism (do you tend to plan for the worst, the best, or somewhere in between?) or your aversion to risk. A family given to worrying might choose to forgo some current spending and investment goals to purchase enough insurance to offset nearly all of the income lost from a spouse's death. Another family might buy what it considers a minimum of insurance, go scuba diving in Cozumel, and pursue an aggressive, growth-oriented investment program. It's up to you.

Figure 6-11 is a worksheet to help you make your own calculations following the Lassiters' model.

INCOME REQUIREMENT

Current after-tax employment income	_____
Less mortgage P&I	_____
Less other debts	_____

Adjusted after-tax income requirement	_____
X % survivor needs	_____

After-tax income required	_____
Kentucky windage adjustment	_____

Daycare	_____
Other child expenses	_____

Total after-tax income required	_____

CURRENT INCOME

Survivor's gross income	_____
Less federal tax	_____
Less state tax	_____
Less Social Security tax	_____

After-tax employment income	_____	
Social Security or other benefits	_____	
Other non-investment income	_____	

After-tax income	_____	
INVESTMENT INCOME		
Liquid Assets		
Securities	_____	
Cash accounts	_____	
Life insurance benefit	_____	

Investment assets		_____
Final Expenses		
Funeral	_____	
Uninsured medical costs	_____	
Administrative fees	_____	
Estate taxes	_____	

Liabilities		
Mortgage	_____	
Other long-term loans	_____	

College fund		_____

Lump sum requirements		_____
Available for investment*		_____
After-tax return		_____
FINAL CALCULATION		
Survivor's required income		_____
Survivor's earned income	_____	
Investment income	_____	

Survivor's after-tax income		_____

Shortfall to be earned		_____
from additional insurance		_____
Additional insurance required		_____
(Shortfall/after-tax investment return)		_____

Figure 6-11: Now it's your turn. If you've followed the Lassiters' calculations (admittedly a bit laborious), this worksheet will allow you to figure your own insurance needs.

Health and Disability Insurance

Without insurance, a major illness or disability that prevents you from working could be more financially devastating to your family than your death. Hospital costs for a serious accident or illness can run to tens of thousands of dollars. If you were incapacitated, you might not only lose your income, but also require expensive medical or nursing care. We're not going to go into great detail here, but health and disability insurance is an important part of an insurance program.

Most people have good health insurance at work. Blue Cross and Blue Shield set the standard. Almost all policies have a deductible. This means you must pay your initial medical costs each year. Deductibles range from \$100 to as much as \$2,000. If you're buying your own insurance, you will pay lower premiums if you accept a higher deductible. In some cases, lowering your deductible may increase premiums by nearly as much as the additional coverage. A bad deal. Most policies require you to pay a portion of your expenses, typically 20%, up to \$1,000 to \$2,500. A good policy will pay all expenses after that.

If you're covered by health insurance at work, you probably do not need additional coverage. It is usually futile—and expensive—to buy overlapping policies. Most good health policies have a provision known as coordination of benefits. This means that an insurance company will not pay for an expense that has been covered by another.

If you're not covered at work, medical insurance is extraordinarily expensive. A Blue Cross-type policy might cost \$750 to \$1,250 for an individual, or \$1,500 to \$3,500 for a family of four. You may be able to save by joining a group plan offered by a professional group or other organization.

Don't think you can't afford the premiums. What you cannot afford is to be without health insurance. A car accident or serious illness can wipe out your life's savings in a matter of weeks. You may even be refused treatment if you do not have insurance, although this is not likely in a life-threatening situation. (And don't think you can rely in a pinch on Medicaid, the government program for the poor. You will be truly needy by the time you're eligible.)

A lack of disability insurance is likely to be the most serious gap in your insurance program. Most workers are covered by workers' compensation insurance, but that covers only job-related illnesses and injuries. If you're covered by Social Security, you're also eligible for disability benefits based on your earnings—but the maximum benefit in 1984 is \$1,281. To qualify, you must be seriously disabled, and the waiting period is at least five months.

You may receive disability insurance as a fringe benefit at work. If so, you may not need additional coverage. However, it's important to check the fine print. Some policies provide coverage only if you're completely shut in; others, if you're unable to continue your present profession.

Private coverage providing \$1,000 a month in benefits for a thirty-five-year-old man might cost \$600 a year with a one-month waiting period, \$450 with a three-month waiting period.

As you can see, a full-bore, no-gaps insurance program could easily cost \$5,000 or \$6,000 a year, or even more. (We haven't even discussed auto and homeowners.) Hardly anybody can reasonably afford that. There is little choice but to compromise. Buy term life insurance. (It's probably a better deal, anyway.) Increase your deductibles. Lower your expectations for life after disaster. You're aiming for financial survival, not a life of ease.

Rules of Thumb and General Advice

- 1) You will probably need sufficient life insurance to replace 60% to 75% of your after-tax income, if you should die. However, individual needs vary greatly. Your *Home Accountant* budget is a more accurate tool for projecting income needs than rules of thumb.
- 2) Many financial advisers recommend buying term insurance and doing your investment separately. Your insurance agent will probably argue otherwise. Commissions may be part of his motive. Judge for yourself.
- 3) Whole life insurance is generally five to six times as expensive as term.
- 4) Especially if you need replacement income for a limited time (to provide for raising children, for example), your survivors may not need to live off the interest of your insurance benefit alone. They may be able to spend the principal without causing economic hardship later.
- 5) You should take inflation into account in determining how much income your insurance benefit will yield for survivors. Historically, investments have yielded 2% to 4%, after inflation. If you figure your return at 3%, the remainder of your earnings will go to keep your principal apace of inflation.
- 6) Insurance is very expensive. A full-fledged program could cost \$5,000 to \$6,000 a year, or more. Cost may force you to plan your insurance conservatively, aiming for financial survival rather than luxury. Insurance is not a consolation prize for disaster.



7 THE TAXMAN COMETH

The income tax has made more liars out of the American people than golf has. Even when you make a tax form out on the level, you don't know when it's through if you're a crook or a martyr.

—Will Rogers

A taxpayer—that's someone who works for the federal government but doesn't have to take the civil service examinations.

—Ronald Reagan

Someone found W.C. Fields (a notorious atheist) reading the Bible on his deathbed, so the story is told. "What are you doing?" the visitor asked. "...Looking for loopholes," Fields replied. Richard Strout, who for years wrote the TRB column in *The New Republic*, had a different perspective on the topic of slipping through the cracks: "Every child in America can hope to grow up to enjoy tax loopholes." On the whole, the tyke has the better odds. The tax laws and the IRS code is virtually a filigree. (Originally, loopholes were slits in the castle wall through which one shot arrows; if you get audited, it will seem the arrows are coming the other way.)

Actually, "loophole" is an unnecessarily pejorative term. Congress deliberately wrote deductions into the law to promote various things, such as home ownership, that were considered to be in the national interest. Calvin Trillin, tongue at least somewhat in cheek, sums up tax policy in *Uncivil Liberties*: "Allowing an income-tax deduction for mortgage interest, for instance, is obviously another way of saying that every man should have a castle—or two or three castles if he is able to pick up a deal on a beach house and scrapes up the down payment on a ski chalet. The ceiling on taxation of capital gains reflects the national belief that speculation is a more worthwhile way to make a living than work. The deduction for charitable contributions is simply the government's way of indicating that rich people are in a better position than poor people to decide which eleemosynary institutions are deserving of the taxpayers' support. Why else would coal miners be required to share the cost of a stockbroker's gift to the St. Paul's School's boat-house fund? The laws providing tax shelters reflect the strong philosophical commitment of the Founding Fathers, particularly Alexander Hamilton, to the principle that the public good would be served if dentists owned cattle ranches."

It is not our purpose to debate tax policy. It would take a pretty hard-eyed reformer to unilaterally attempt redistribution of wealth by refusing to take tax breaks to which he was legally entitled. Do you suppose Trillin declines to deduct the interest on his mortgage if he has one? Or deductions for

contributions to boat-house funds if he makes them? And who wouldn't prefer a long-term capital gain, taxed at a maximum of 20%, to taking a second job?

Any explanation of the tax laws must begin with a caveat. The Internal Revenue Code is some thousands of pages of fine print. Anyone who thinks he understands it—even if he's right—is liable to be proved wrong by a new IRS interpretation the next day. If you're on the same wave length as the IRS, the tax court may say you're both wrong. And, even if everyone agrees on the rules, the IRS is apparently able to count the angels dancing on the head of a pin and conclude that only 31.7% of them are tax-deductible.

As if this were not sufficient cause for confusion, Congress from time to time changes the ground rules, as it did in 1984. Richard Eisenberg writes in *Money* magazine: "In case anyone still doubts that tax planning is a year round-effort, even in the dog days of summer, Congress has passed its 770-page, 329-provision Tax Reform Act of 1984, which closes loopholes, opens new ones and greatly compounds the complexities of our already baffling tax code."

Probably the most important change for most people is an improvement in an already good tax break. You now have to hold a security or piece of real estate for only six months before taxes on profits from its sale are taxed at the favorable capital gains rate— 40% of your rate for regular income. The old holding period was one year.

Other changes narrow loopholes, but they probably will affect far fewer people. The depreciation period for investment real estate is extended from fifteen to eighteen years. Rules governing tax shelter deals are tightened to disallow deductions for expenses not actually paid during the year claimed. The deals most affected will be those claiming considerably more write-offs than your first-year investment: real estate partnerships and research and development deals, for example. Public shelters sold through brokers and financial planners, which offer smaller write-offs, are not seriously affected. Capital gains treatment of Treasury bonds and corporate bonds is disallowed. Only tax-exempt municipals are excepted. The new law also makes life more difficult for people who purchase a computer partly for business use and partly for personal use. More about that shortly.

If a camel is a horse designed by a committee, the Internal Revenue Code version has seventeen humps. What follows is only a general discussion of tax strategies. If you have any doubts, consult your accountant or other tax professional.

To manage your financial affairs effectively, you must make decisions with an eye to their tax implications. Taxes will be an increasingly important consideration, as you shift focus from your current situation to the future.

Inflation and "bracket creep" will have raised your tax bill, even if your buying power has not increased in years. Taking into account inflation, federal income tax, and Social Security taxes, a one-income family needed a pretax income of \$62,382 in 1983 to match the buying power of a \$25,000

income in 1970, according to the Conference Board, a business research group. Most of that dramatic difference is due to inflation; a 1983 dollar was the equivalent of 43 cents in 1970. Even without paying higher taxes, the family's income would have had to grow to more than \$58,000 to keep pace with inflation. Still, the taxman's share for federal income tax and Social Security would have increased from 13.6% to 16.5% of the family's gross income. More importantly, the family's federal income tax bracket would have been 28% in 1970, 49% in 1983. (The family would have already paid the maximum Social Security tax in both cases.) To spend an extra dollar in 1970, the family would have had to increase its income by \$1.39. An equivalent increase in buying power, after inflation and taxes, would require an earnings increase of \$4.56 in 1983.

If it's any consolation, the maximum tax rate hovered between 85% and 95% from the mid-forties to the mid-sixties. Now the maximum rate is 50%.

There's not much an individual can do about inflation, but you do have some control over your taxes. Reducing taxes is not an end in itself, but a means toward reaching other financial goals. The object of tax planning is not necessarily to reduce taxes to the lowest possible level. That might require life style adjustments you do not wish to make, and it would distort your financial planning and investment strategy. For example, tax shelters that make extravagant claims about write-offs are usually poor investments. Even before the 1984 tax revisions, such deals have always invited the attention of IRS auditors. An auditor may disallow the deductions on shady tax shelters and leave you holding the bag with an investment whose only allure was its write-offs.

Many people in upper income brackets will have difficulty meeting their financial goals, unless they pay careful attention to the tax implications of their investments. Some advisers suggest that you take a hard look at reducing taxes, if your federal income tax eats more than 20% of your employment income. Others say that tax planning should be a consideration for any individual who earns more than \$20,000 or any couple with an income of more than \$40,000.

Tax planning can be divided into three steps: assessing your current situation; making sure you're taking advantage of the deductions coming to you; and selecting investments that yield write-offs, tax-free income, or tax-preferred income. The benefits are not only a lower tax bill, but also an escape from the April 15 panic.

Estimating Taxes

If you prepared last year's taxes on *The Tax Advantage*, its tax planning feature will help you quickly assess the implications of changes in income. (See the tax planning section of the manual. You may want to make a copy of your tax data disk, so you can play with the numbers without worrying about changing the original.) Tax rates dropped slightly between 1983 and 1984,

and Congress tinkered vigorously with the tax laws in '84. For most people, however, such shifts are unlikely to be large enough to change their overall tax status. If you have the current year's *Tax Advantage*, plugging in income estimates based on last year's tax return will give you a very flexible tool for weighing the tax effects of your decisions. If you do not have *The Tax Advantage*, you can follow along, using your last tax return, budget projections, and the 1983 and 1984 tax tables shown below. (Note that the decrease from 1983 to 1984 is one to three percentage points in the marginal tax rate for each income range.)

Going back to the Lassiter's tax forms in Chapter 3, we see that their 1983 gross income was \$61,379, counting Susan's freelancing loss of \$1,541. They paid \$16,922 in taxes—\$9,870 in federal income tax, \$2,978 in state income tax, and \$4,074 in Social Security taxes. These taxes consumed 27% of their gross income; 16% of their income went to federal income taxes. That means they spent the first quarter-through March—working for the federal and state governments. Their deductions on Schedule A show they paid another 1.6% of their gross income, \$1,049, for property and sales taxes. All told, they finished working to pay taxes about the time they filed their income tax returns on April 16. (April 15 came on a Sunday in 1984, giving everybody a day of grace.)

The Lassiters aren't doing too badly by national standards. The average tax burden is 35% of income, enough to take you into early May, according to the Tax Foundation, which keeps track of such things. And the Lassiters' income is definitely upscale, which means they should expect an upscale tax burden. Their adjusted gross income was \$54,863. Well below 5% of the returns filed in 1981 listed adjusted gross incomes of above \$50,000.

It may be comforting that federal income tax took only 16% of the Lassiters' gross income, but that's not the relevant figure for weighing the tax implications of investments or for figuring out how much of the next raise is going to wind up in the cookie jar. The income tax is progressive; the more you earn, the more tax you pay on each additional dollar of income. The Lassiters are suffering bracket creep.

The Lassiters load a copy of their 1983 tax disk and press T (for Tax). The program tells them their tax bracket is 35%. This means they will pay more than twice their average tax rate on each additional dollar they earn. (If you are not using *The Tax Advantage*, you can look up your 1983 marginal tax rate in Figure 7-1.) Figure 7-2 shows that, at the same income level, their marginal federal tax rate would be 33% in 1984. Not much help.

There's more bad news. The Lassiters are on the verge of jumping into a higher tax bracket. Their 1983 taxable income (Line 37 on Form 1040) is \$44,485. The next tax bracket starts at \$45,800. Using the tax planning feature of *The Tax Advantage*, the Lassiters experiment with eliminating Susan's \$1,541 freelance loss for 1983. The increase not only requires them to pay tax on more income, but also pushes them into a higher bracket. Their tax refund promptly drops from \$679 to \$125, and their tax rate hops to 40% (38% for

1983 Tax Rate Schedules Your zero bracket amount has been built into these Tax Rate Schedules.

Caution: You must use the Tax Table instead of these Tax Rate Schedules if your taxable income is less than \$50,000 unless you use **Schedule G** (income averaging), to figure

your tax. In that case, even if your taxable income is less than \$50,000, use the rate schedules on this page to figure your tax.

Schedule X Single Taxpayers

Use this Schedule if you checked **Filing Status Box 1** on Form 1040—

If the amount on Form 1040, line 37 is:	But not over—	Enter on Form 1040, line 38	of the amount over—
Over—			
\$0	\$2,300	—0—	
2,300	3,400	.....11%	\$2,300
3,400	4,400	\$121 + 13%	3,400
4,400	8,500	251 + 15%	4,400
8,500	10,800	866 + 17%	8,500
10,800	12,900	1,257 + 19%	10,800
12,900	15,000	1,656 + 21%	12,900
15,000	18,200	2,097 + 24%	15,000
18,200	23,500	2,865 + 28%	18,200
23,500	28,800	4,349 + 32%	23,500
28,800	34,100	6,045 + 36%	28,800
34,100	41,500	7,953 + 40%	34,100
41,500	55,300	10,913 + 45%	41,500
55,300	.....	17,123 + 50%	55,300

Schedule Z

Unmarried Heads of Household

(including certain married persons who live apart—see page 6 of the instructions)

Use this schedule if you checked **Filing Status Box 4** on Form 1040—

If the amount on Form 1040, line 37 is:	But not over—	Enter on Form 1040, line 38	of the amount over—
Over—			
\$0	\$2,300	—0—	
2,300	4,400	.....11%	\$2,300
4,400	6,500	\$231 + 13%	4,400
6,500	8,700	504 + 15%	6,500
8,700	11,800	834 + 18%	8,700
11,800	15,000	1,392 + 19%	11,800
15,000	18,200	2,000 + 21%	15,000
18,200	23,500	2,672 + 25%	18,200
23,500	28,800	3,997 + 29%	23,500
28,800	34,100	5,534 + 34%	28,800
34,100	44,700	7,336 + 37%	34,100
44,700	60,600	11,258 + 44%	44,700
60,600	81,800	18,254 + 48%	60,600
81,800	.....	28,430 + 50%	81,800

Schedule Y

Married Taxpayers and Qualifying Widows and Widowers

Married Filing Joint Returns and Qualifying Widows and Widowers

Use this schedule if you checked **Filing Status Box 2** or **5** on Form 1040—

If the amount on Form 1040, line 37 is:	But not over—	Enter on Form 1040, line 38	of the amount over—
Over—			
\$0	\$3,400	—0—	
3,400	5,500	.....11%	\$3,400
5,500	7,600	\$231 + 13%	5,500
7,600	11,900	504 + 15%	7,600
11,900	16,000	1,149 + 17%	11,900
16,000	20,200	1,846 + 19%	16,000
20,200	24,600	2,644 + 23%	20,200
24,600	29,900	3,656 + 26%	24,600
29,900	35,200	5,034 + 30%	29,900
35,200	45,800	6,624 + 35%	35,200
45,800	60,000	10,334 + 40%	45,800
60,000	85,600	16,014 + 44%	60,000
85,600	109,400	27,278 + 48%	85,600
109,400	.....	38,702 + 50%	109,400

Married Filing Separate Returns

Use this schedule if you checked **Filing Status Box 3** on Form 1040—

If the amount on Form 1040, line 37 is:	But not over—	Enter on Form 1040, line 38	of the amount over—
Over—			
\$0	\$1,700	—0—	
1,700	2,750	.....11%	\$1,700
2,750	3,800	\$115.50 + 13%	2,750
3,800	5,950	252.00 + 15%	3,800
5,950	8,000	574.50 + 17%	5,950
8,000	10,100	923.00 + 19%	8,000
10,100	12,300	1,322.00 + 23%	10,100
12,300	14,950	1,828.00 + 26%	12,300
14,950	17,600	2,517.00 + 30%	14,950
17,600	22,900	3,312.00 + 35%	17,600
22,900	30,000	5,167.00 + 40%	22,900
30,000	42,800	8,007.00 + 44%	30,000
42,800	54,700	13,639.00 + 48%	42,800
54,700	.....	19,351.00 + 50%	54,700

Figure 7-1: The 1983 tax tables.

1984 and after). The good news is that the next four-percentage point increase in marginal tax rate will not come until their taxable income reaches \$60,000.

Suppose the Lassiters each got a \$3,000 raise. That's \$6,000 a year, \$500 a month. Not to head straight for the furrier or furniture store, however. The federal government will take 38%, or \$190 a month, off the top. Maryland will

1984 Tax Rate Schedules

Caution: Do not use these Tax Rate Schedules to figure your 1983 taxes. Use only to figure your 1984 estimated taxes.

SCHEDULE X—Single Taxpayers				SCHEDULE Z—Heads of Household			
If line 5 is:		The tax is:		If line 5 is:		The tax is:	
Over—	but not over—		of the amount over—	Over—	but not over—		of the amount over—
\$0	\$2,300	—0—		\$0	\$2,300	—0—	
2,300	3,400	----- 11%	\$2,300	2,300	4,400	----- 11%	\$2,300
3,400	4,400	\$121 + 12%	3,400	4,400	6,500	\$231 + 12%	4,400
4,400	6,500	241 + 14%	4,400	6,500	8,700	483 + 14%	6,500
6,500	8,500	535 + 15%	6,500	8,700	11,800	791 + 17%	8,700
8,500	10,800	835 + 16%	8,500	11,800	15,000	1,318 + 18%	11,800
10,800	12,900	1,203 + 18%	10,800	15,000	18,200	1,894 + 20%	15,000
12,900	15,000	1,581 + 20%	12,900	18,200	23,500	2,534 + 24%	18,200
15,000	18,200	2,001 + 23%	15,000	23,500	28,800	3,806 + 28%	23,500
18,200	23,500	2,737 + 26%	18,200	28,800	34,100	5,290 + 32%	28,800
23,500	28,800	4,115 + 30%	23,500	34,100	44,700	6,986 + 35%	34,100
28,800	34,100	5,705 + 34%	28,800	44,700	60,600	10,696 + 42%	44,700
34,100	41,500	7,507 + 38%	34,100	60,600	81,800	17,374 + 45%	60,600
41,500	55,300	10,319 + 42%	41,500	81,800	108,300	26,914 + 48%	81,800
55,300	81,800	16,115 + 48%	55,300	108,300	-----	39,634 + 50%	108,300
81,800	-----	28,835 + 50%	81,800				

SCHEDULE Y—Married Taxpayers and Qualifying Widows and Widowers				Married Filing Joint Returns and Qualifying Widows and Widowers			
If line 5 is:		The tax is:		If line 5 is:		The tax is:	
Over—	but not over—		of the amount over—	Over—	but not over—		of the amount over—
\$0	\$3,400	—0—		\$0	\$1,700	—0—	
3,400	5,500	----- 11%	\$3,400	1,700	2,750	----- 11%	\$1,700
5,500	7,600	\$231 + 12%	5,500	2,750	3,800	\$115.50 + 12%	2,750
7,600	11,900	483 + 14%	7,600	3,800	5,950	241.50 + 14%	3,800
11,900	16,000	1,085 + 16%	11,900	5,950	8,000	542.50 + 16%	5,950
16,000	20,200	1,741 + 18%	16,000	8,000	10,100	870.50 + 18%	8,000
20,200	24,600	2,497 + 22%	20,200	10,100	12,300	1,248.50 + 22%	10,100
24,600	29,900	3,465 + 25%	24,600	12,300	14,950	1,732.50 + 25%	12,300
29,900	35,200	4,790 + 28%	29,900	14,950	17,600	2,395.00 + 28%	14,950
35,200	45,800	6,274 + 33%	35,200	17,600	22,900	3,137.00 + 33%	17,600
45,800	60,000	9,772 + 38%	45,800	22,900	30,000	4,886.00 + 38%	22,900
60,000	85,600	15,168 + 42%	60,000	30,000	42,800	7,584.00 + 42%	30,000
85,600	109,400	25,920 + 45%	85,600	42,800	54,700	12,960.00 + 45%	42,800
109,400	162,400	36,630 + 49%	109,400	54,700	81,200	18,315.00 + 49%	54,700
162,400	-----	62,600 + 50%	162,400	81,200	-----	31,300.00 + 50%	81,200

Figure 7-2: The 1984 tax tables. The marginal tax rate has dropped by 1 to 3 percentage points in each bracket.

take another 5%, or \$25. Already the \$500 raise is pared down to \$285. The same thing will happen to any taxable investment income, except long-term capital gains.

On the other hand, when the Lassiters put \$4,000 into their IRAs this year, 43%—\$1,720—will in effect be supplied by the government. If the Lassiters had spent the money elsewhere, they would have paid the government's contribution in taxes, leaving them with \$2,280 to invest elsewhere. The IRA is the equivalent of an instant 75% return on that \$1,280 investment. By the same token (as Roy Blount says, you can ride the subway many times, but never by the same token), if Susan should decide to buy a \$500 word processing program, and it's deductible, the actual cost would be reduced by 43%, to \$285.

Social Security tax (FICA) complicates the tax picture further. Employees must pay 6.7% of their gross income in Social Security taxes in 1984. The maximum taxable income is \$37,800, up from \$35,700 in 1983. (Susan is one

of those professionals who earn about their age and may never catch up with the rising limit on taxable income.) After 1984, the employee rate will match the employer rate:

1985	7.05%
1986 and '87	7.15%
1988 and '89	7.51%
1990	7.65%

The bite is deeper for self-employed people, since they have no employers to pay part of the tax. The effective rates are:

1984	11.3%
1985	11.8%
1986 and '87	12.3%
1988 and '89	13.02%
1990	15.3%

In practical terms, Social Security taxes mean the taxman will take another 7% of any raises the Lassiters receive, bringing the taxman's share to a round 50%. On Susan's freelance income this year, the levy could be 54.3%.

Ouch.

Since the Lassiters are on the verge of slipping into a higher bracket, a reasonable tax goal might be to avoid that higher marginal rate by increasing deductions or shifting investments into tax-preferred instruments.

Deductions

The first step toward controlling your tax burden is to make sure you're taking advantage of deductions to which you are legally entitled. *The Home Accountant* will help you improve your recordkeeping to snare deductions that may be slipping through the cracks rather than helping you slip (legally) through the loopholes in the Internal Revenue Code.

The standard procedure is to claim deductions as soon as possible and to defer taxes whenever you can. Thus, you might decide to make a deductible purchase in December rather than waiting a month or two or defer sending a bill for services rendered until after the first of the year. Taking into account the time value of money, this strategy is usually sound. In certain situations, however, you might want to do the reverse. For example, you might want to accelerate self-employment income if you have paid the maximum Social Security tax this year but think you might not reach that point next year. Even if you have to pay taxes at a higher rate, the difference may not be as great as the 11.8% in Social Security taxes you'd pay in 1985. A divorce might give rise to similar considerations. The earner in a one-income household will probably pay taxes at a higher rate after the divorce; in a two-income family, a divorce may result in lower tax rates for both spouses.

The Home Accountant and *The Tax Advantage* will make the April 15 game a more even contest. Your computer will transfer your *Home Accountant* data directly to the tax program, sparing you the task of entering the data

again, and all the arithmetic will be done for you. If you do not use *The Tax Advantage*, you can adapt your *Home Accountant* categories to the deductions you plan to claim. If you plan to transfer the data, however, you *must* use budget categories *The Tax Advantage* recognizes. (These are shown in Figure 7-3.) When you transfer the data, it will not be itemized; only the total in each category is transferred. It may be necessary to enter some data by hand. For example, *The Tax Advantage* recognizes INTEREST/T and DIVIDENDS/T but no other categories for dividends and interest. The IRS, on the other hand, requires you to itemize interest and dividends by source. If you have interest and dividends from several sources, you can set up separate *Home Accountant* categories for each and itemize the totals by hand on *The Tax Advantage*. If you receive annual statements of dividends and interest (as you probably do), an alternative is to assign payments to INTEREST/T and DIVIDENDS/T, then do the itemization from the statements. Be sure to reconcile the amounts. If your numbers don't add up, you may attract the attention of the IRS, which is definitely not the object of this exercise.

<p>FORM 1040</p> <p>WAGES/T</p> <p>TAX REFUNDS/T</p> <p>ALIMONY RECEIVED/T</p> <p>PENSION TAXABLE/T</p> <p>PENSION OTHER/T</p> <p>PENSION TAX AMNT/T</p> <p>UNEMPLOYMENT COMP/T</p> <p>TAXABLE UNEMPL/T</p> <p>INCOME OTHER/T</p> <p>MOVING EXPENSE/T</p> <p>EMPLY.BUS.EXP./T</p> <p>IRA/T</p> <p>KEOGH/T</p> <p>INTEREST PENALTY/T</p> <p>ALIMONY PAID/T</p> <p>TAX WITHHELD/T</p> <p>ESTIMATED TAX/T</p> <p>EARNED INCOME CRDT/T</p>	<p>CONTRIBUTIONS CASH/T</p> <p>CONTRIBUTIONS LRGE/T</p> <p>DUES/T</p> <p>TAX RTRN PREP FEE/T</p> <p>DEDUCTIONS MISC/T</p>
<p>SCHEDULE A</p> <p>MEDICINES/T</p> <p>DOCTORS ETC/T</p> <p>TRANSPORT MEDICAL/T</p> <p>MEDICAL OTHER/T</p> <p>TAX LOCAL INCOME/T</p> <p>TAX REAL ESTATE/T</p> <p>TAX SALES/T</p> <p>TAX VEHICLE/T</p> <p>TAXES OTHER/T</p> <p>MORTGAGE INST/T</p> <p>MORTGAGE INDV/T</p> <p>INTEREST CRDT CARD/T</p> <p>INTEREST EXPENSE/T</p>	<p>SCHEDULE B</p> <p>MORTGAGE INCOME/T</p> <p>INTEREST INCOME/T</p> <p>INTEREST ASC/T</p> <p>DIVIDENDS/T</p> <p>SCHEDULE C</p> <p>RECEIPTS GROSS/T/*</p> <p>ALLOWANCES/T/*</p> <p>INCOME (BUS)/T/*</p> <p>ADVERTISE (BUS)/T/*</p> <p>BAD DEBTS/T/*</p> <p>BANK CHARGES/T/*</p> <p>VEHICLE EXPENSES/T/*</p> <p>COMMISSIONS/T/*</p> <p>DEPLETION (BUS)/T/*</p> <p>DUES AND PUBL./T/*</p> <p>EMPLOYEE BENEFIT/T/*</p> <p>FREIGHT (BUS)/T/*</p> <p>INSURANCE (BUS)/T/*</p> <p>INTEREST (BUS)/T/*</p> <p>CLEANING (BUS)/T/*</p> <p>PROF. SERVICES/T/*</p> <p>OFFICE EXPENSES/T/*</p> <p>PENSION PLANS/T/*</p> <p>RENT (BUS)/T/*</p> <p>REPAIRS (BUS)/T/*</p>

SUPPLIES (BUS)/T/* TAXES (BUS)/T/* TRAVEL ENTERTAIN/T/* UTILITIES (BUS)/T/* WAGES (BUS)/T/* EXPENSES (BUS)/T/*	SCHEDULE E RENTS RECEIVED/T/* ROYALTIES RCVD/T/* ADVERTISING (PR)/T/* AUTO TRAVEL/T/* CLEANING (PR)/T/* COMMISSIONS (PR)/T/* INSURANCE (PR)/T/* INTEREST (PR)/T/* FEES (PR)/T/* REPAIRS (PR)/T/* SUPPLIES (PR)/T/* TAXES (PR)/T/* UTILITIES (PR)/T/* WAGES (PR)/T/* EXPENSES (PR)/T/*
SCHEDULE C, Part III PURCHASES/T/* LABOR COST/T/* MATERIALS/T/* COST (BUS)/T/*	
SCHEDULE D ALL ITEMS MUST BE ENTERED INTO THE TAX ADVANTAGE.	SCHEDULE SE FICA AND RRATA/T TIPS/T

Figure 7-3: *The Tax Advantage* recognizes only these *Home Accountant* budget categories. You must use them if you want to transfer data automatically from *The Home Accountant* to *The Tax Advantage*. The categories closely match Form 1040. Using them will simplify your year-round tax planning.

Your *Home Accountant* and *Tax Advantage* records will help you survive an audit, but they will not be sufficient for the IRS. It is important to keep records the IRS will recognize. These include cancelled checks, receipts, bills, and credit card slips. They should show the date, place, amount paid, and service or item purchased. An accordion file folder with compartments is a handy place to keep these records. In some instances, annual statements will take the place of dozens of receipts or checks. Your bank or S&L, for example, will report interest paid to your accounts. You will also receive statements showing interest and taxes paid in connection with your mortgage and the interest paid on your credit cards. The IRS will also recognize carefully kept logs of business expenses, such as automobile mileage. It is important to keep such logs up to date; the IRS may disallow expense logs patched together after the fact. Wherever possible, expenses should be supported by receipts and cancelled checks.

Generally, you should keep tax records for three years after you file your return; this is the period during which you are liable to audit. Some records should be kept longer. Income averaging requires tax returns for the last four years. You should keep records concerning the purchase price of stocks, real estate, and other long-term investments until you sell them. Those records will be the basis for determining your taxable capital gains.

Adjustments To Income

Some deductions are taken from income before the calculation of adjusted gross income on Form 1040. Unlike the deductions on Schedule A, these can be taken whether or not you claim the standard deduction. These include:

A. Business income or loss. This is an income category on Form 1040. If you are self-employed or have an outside business income in addition to a regular job, you must fill out Schedule C, Profit or (Loss) From Business or Profession, and Schedule SE, self-employment (Social Security) tax. *The Tax Advantage* includes Schedule C, and *The Home Accountant* can be used to keep books for a small business.

Business accounting is beyond the scope of this book. However, two observations seem appropriate for people who earn a second income from a home business and who don't use an accountant.

First, Schedule C deductions are more valuable than those on Schedule A. You may deduct business expenses on Schedule C, even if you take a standard deduction rather than itemizing. In addition, Schedule C expenses may increase your medical deduction. You may claim medical deductions only for expenses that exceed 5% of your adjusted gross income. Schedule C expenses reduce your adjusted gross income and thus may increase your medical deductions; Schedule A deductions are made after adjusted gross income is computed.

Second, if you use Schedule C, you have two attractive options for writing off equipment purchases. You can write off as an expense the cost of equipment costing up to \$5,000 (\$2,500 if you're married and filing separately). You may instead decide to claim a tax *credit* (10% for equipment, including computers and other office machines, depreciated over five years or more; 6% for equipment depreciated over three years). You cannot do both, of course; if you take the credit, you must depreciate the equipment. See section on computers below.

Categories That Can Be Transferred To *The Tax Advantage*: *The Tax Advantage* supports a full range of Schedule C categories, shown in Figure 7-4.

Records To Keep: Cancelled checks and receipts, indicating date, amount, and purpose of expenditure.

B. Gains or losses on sales or exchanges of property. Long-term capital gains—profits on assets sold at a profit—are taxed at only 40% the rate you pay on ordinary income, yielding a maximum rate of 20%. (Technically, 60% of long-term capital gains are excluded from income.) The new tax law reduces the required holding period to six months from a year. The change is effective through the end of 1987. Capital gains on property held for shorter periods are taxed as regular income. Thus, deferring sales until the holding period has passed can result in substantial tax savings. (If you're selling shares of stock acquired over a period of time up to the present, be sure the shares you sell are the older ones, so profits will be taxable at the lower rate.)

1984 Estimated Tax Worksheet (Keep for your records—Do Not Send to Internal Revenue Service)			
1	Enter amount of Adjusted Gross Income you expect in 1984		1
2 a	If you plan to itemize deductions, enter the estimated total of your deductions. (If you do not plan to itemize deductions, skip to line 2c and enter zero)	2a	
b	Enter { \$3,400 if married filing a joint return (or qualifying widow(er)) \$2,300 if single (or head of household) \$1,700 if married filing a separate return }	2b	
c	Subtract line 2b from line 2a (if zero or less, enter zero)		2c
d	If you do not itemize deductions, enter your allowable deduction, if any, for charitable contributions (see Instruction B.4 on page 1)		2d
3	Subtract line 2c or 2d, whichever applies, from line 1		3
4	Exemptions (multiply \$1,000 times number of personal exemptions)		4
5	Subtract line 4 from line 3		5
6	Tax. (Figure your tax on line 5 by using Tax Rate Schedule X, Y, or Z in these instructions. DO NOT use the Tax Table or Tax Rate Schedule X, Y, or Z in the 1983 Form 1040 Instructions.)		6
7	Enter any additional taxes (see line 7 instruction)		7
8	Add lines 6 and 7		8
9	Credits (credit for the elderly, credit for the permanently and totally disabled, credit for child and dependent care expenses, investment credit, residential energy credit, etc.)		9
10	Subtract line 9 from line 8		10
11	Tax from recapture of investment credit		11
12	Estimate of 1984 self-employment income \$ _____; if \$37,800 or more, enter \$4,271.40; if less, multiply the amount by .113 (see line 12 instruction for additional information)		12
13	Tax on premature distributions from an IRA		13
14	Add lines 10 through 13		14
15 a	Earned income credit	15a	
b	Estimated income tax withheld and to be withheld (including income tax withholding on pensions, annuities, certain deferred income, etc.) during 1984	15b	
c	Credit for Federal tax on gasoline and special fuels (see Form 4136)	15c	
16	Total (add lines 15a, b, and c)		16
17	Estimated tax (subtract line 16 from line 14). If \$400 or more, fill out and file the payment-voucher along with your payment; if less, no payment is required at this time. If you are applying an overpayment from 1983 to 1984 estimated tax, see Instruction C.(2), page 1.		17
Caution: You are required to prepay at least 80% of your tax liability each year. If you prepay less than 80% of your actual tax liability, you will be subject to a penalty (see Instruction E). To avoid this, make sure your estimate is as accurate as possible. If you are unsure of your estimate, you may want to pay more than 80% of the amount you have estimated. In determining the amount of your estimated tax, you may take into account any of the exceptions to the underpayment penalty. For more information on these exceptions, please get Publication 505.			
18	If the first payment you are required to make is due April 16, 1984, enter 1/4 of line 17 (less any 1983 overpayment that you are applying to this installment) here and on line 1 of your payment-voucher. You may round off cents to the nearest whole dollar. If you wish to pay more estimated tax than is shown on line 17, you may do so		18

Tear off here

Form **1040-ES** | **1984**
Department of the Treasury | **Payment-**
Internal Revenue Service | **Voucher**

OMB No. 1545-0087

Return this voucher with check or money order payable to the Internal Revenue Service.
Please do not send cash or staple your payment to this voucher.

(Calendar year—Due Jan. 16, 1985)

1 Amount of payment \$ _____	2 Fiscal year filers enter year ending _____ (month and year)	Please type or print	Your social security number	Spouse's number, if joint payment
			First name and middle initial (of both spouses if joint payment) Last name	
			Address (Number and street)	
			City, State, and ZIP code	
File only if you are making a payment of estimated tax.				

For Paperwork Reduction Act Notice, see instructions on page 1.

Page 3

Figure 7-4: Use Form 1040-ES to report self-employment income, capital gains, interest and dividends, or other income from which taxes have not been withheld.

Capital losses are deductible, up to \$3,000 a year. Losses of more than that may be carried over to future years. Short-term losses may be deducted dollar for dollar from regular income. Long-term losses may be deducted at a rate of \$1 for every \$2 in losses.

The upshot is, long-term gains are better than short-term gains; short-term losses are better than long-term losses. But there is a further complication. Capital gains and losses are totaled up before the balance is transferred to Form 1040. This means that a long-term loss can offset a short-term gain. This is good: otherwise, the gain would be fully taxable, and you would be able to deduct only half of the loss. On the other hand, a short term loss can cancel a long-term gain. This is bad: your deduction is worth only 40 cents on the dollar, since you get a nice tax break on the gain, anyway. Pay attention in planning your transactions.

Categories That Can Be Transferred To *The Tax Advantage*: None.

Records To Keep: The date you purchased the asset, what you paid for it, the date you sold it, the sale price. In the case of securities, purchase and sales confirmations from your brokerage house will verify this information. In the case of real estate, you must also keep records of improvements, which will increase your basis in the property, thus reducing your taxable gain. Your income tax returns will include depreciation deducted from your taxable income. This will reduce your basis, increasing the taxable gain.

C. Moving expenses related to your job or business. The reason for the move, of course, *must* be job-related, and only unreimbursed expenses may be deducted.

Category That Can Be Transferred To *The Tax Advantage*: MOVING EXPENSE/T.

Records To Keep: Cancelled checks and receipts for: the moving company; truck or van rental; travel, lodging, and temporary living expenses; title, appraisal, and attorney's fees in connection with selling your home.

D. Unreimbursed business expenses incurred by employees. This item consists primarily of business travel expenses for which you are not reimbursed by your employer. Travel, transportation, meals, lodging, and any expenses associated with being an outside salesperson may be deducted on Line 24 of Form 1040, even if you do not itemize deductions. (You'll have to fill out Form 2106, Employee Business Expenses. All other job-related expenses must be itemized on Schedule A.)

Categories That Can Be Transferred To *The Tax Advantage*: EMPLOY.BUS. EXP./T.

Records To Keep: The basic record should be a daily log of your expenses. It should be backed up by receipts, credit card slips, and cancelled checks. These should include the following information: amount, date, place, nature of expense, and business purpose. Some credit card slips have space for this information on the back, and this is usually considered adequate if it is filled out when you sign the slip. Checks are also usually acceptable, if the informa-

tion is noted on the check at the time it is written. Receipts are usually not required for expenditures of less than \$25, but it's a good idea to keep them if they're available.

E. Contributions to Individual Retirement Accounts (the IRS calls them Individual Retirement Arrangements) and Keogh retirement plans. These are deducted in calculating adjusted gross income. (Actually taxes are deferred until you withdraw money after retirement, when your tax rate will presumably be lower.) Income on these investments is also deferred until money is withdrawn. Despite stiff penalties if you withdraw money before you're 59½, these are among the best tax deals available for moderate income people. Employed people can contribute up to \$2,000 per year to an IRA. If both spouses work, married taxpayers can contribute \$2,000 each. One-income married couples can contribute up to \$2,250. Self-employed people can contribute up to 25% (or a maximum of \$30,000 in 1984) of their self-employment income to a Keogh retirement plan. Self-employed taxpayers may contribute to IRAs, even if they make the maximum Keogh contribution. Employed taxpayers may contribute to a Keogh if they have outside self-employment income. IRA contributions may be made until your return is due, including extensions. Keogh plans must be set up by the end of your tax year (normally December 31), but contributions can be made until you file your return.

Categories That Can Be Transferred To *The Tax Advantage*: IRA/T, KEOGH/T.

Records To Keep: Bank or other investment statements are preferred. Cancelled checks or receipts will probably do.

F. Penalties for early withdrawal of savings.

Category That Can Be Transferred To *The Tax Advantage*: INTEREST PENALTY/T

Records To Keep: Statement showing penalty and cancelled check.

G. Alimony. Alimony paid is deductible (and alimony received is taxable). Child support, property settlements, and voluntary payments are not deductible.

Category That Can Be Transferred To *The Tax Advantage*: ALIMONY PAID/T, ALIMONY RECEIVED/T.

Records To Keep: Cancelled checks, divorce or support decree, separation agreement. (Record-keeping is especially important, if your former spouse does not report the alimony as income.)

Schedule A Deductions

A standard deduction for each taxpayer is figured into the tax rates. The standard deduction, also known as the zero-bracket amount, is currently \$3,400 for married taxpayers filing jointly, \$1,700 for married taxpayers filing separately, and \$2,300 for single taxpayers and heads of household. If you itemize, the zero-bracket amount is subtracted from your itemized deduc-

tions. You will itemize only if the total of your deductions is larger than the standard deduction. Deductions itemized on Schedule A include:

A. Medical and dental expenses, drugs, and health insurance premiums, in excess of 5% of adjusted gross income. You may also deduct transportation costs—12 cents a mile or actual costs. (Ambulance fees are deductible if you are not reimbursed.) The definition of “medical” is fairly broad. It covers doctors, dentists, psychologists, psychiatrists, chiropractors, acupuncturists, Christian Scientist practitioners, and others. Medicines include prescription drugs, birth control pills, and prescribed vitamins. You may deduct health insurance premiums, but not the basic cost of Medicare A. (Medicare A is the hospital portion of the program. You do not pay premiums if you receive Social Security benefits. Those not receiving Social Security may purchase Medicare A.) Of course, you may not deduct medical expenses reimbursed by your insurance company.

If you stay reasonably healthy and/or have adequate health insurance, it's fairly unlikely that your medical expenses will exceed 5% of your adjusted gross income. For example, if your adjusted gross income is \$40,000, you may deduct only medical expenses above \$2,000, after insurance reimbursements. (Exceptions: health insurance often does not cover or provides only partial coverage for psychological therapy, dental work, and pregnancy. All of these are expensive and may put you over the 5% exclusion.) However, keeping medical records will involve little extra trouble if you have established a good record-keeping system, and one never knows when a major medical expense may occur.

A note about adjustments to income on Form 1040, as opposed to deductions of Schedule A: adjustments to income reduce your adjusted gross income—and thus your allowable medical deductions—whereas regular deductions are figured in later on the tax form. For example, the \$4,000 you and your spouse invest in an IRA reduces your adjusted gross income by that amount. It also reduces the threshold for medical deductions by \$200 (5% of \$4,000), which will reduce your tax bill by up to \$100 (for the 50% bracket), if you're eligible for a medical deduction. The same applies to deductions against outside business income. If you're taking a medical deduction, an employee business expense (Line 23) or outside business deduction on Schedule C (business income) will be worth more than a deduction on Schedule A.

Categories That Can Be Transferred To *The Tax Advantage*: MEDICINES/T, DOCTORS ETC/T, TRANSPORT MEDICAL/T, MEDICAL OTHER/T.

Records To Keep: Cancelled checks or credit card slips, bills, paycheck stubs showing deductions for insurance. Transportation expenses should be documented by a log, and, if possible, receipts. Insurance reimbursements will not be much of a problem, if they're made directly to the medical provider and you are billed only for the excess. (Insurance reimbursements will probably be noted on your bill.) If reimbursements are made to you, you

must keep accurate records of these payments and deduct them from your expenses. Be sure to keep records on all family members.

B. State and local income, sales, and property taxes. All deductible. Taxes you cannot deduct include (of course) federal income tax, Social Security tax, federal estate and gift taxes, taxes on cigarettes and alcohol, and federal excise tax on personal property, transportation, telephone, and gasoline.

Categories That Can Be Transferred To *The Tax Advantage*: TAX LOCAL INCOME/T, TAX REAL ESTATE/T, TAX SALES/T, TAX VEHICLE/T, TAXES OTHER/T.

Records To Keep: Most people calculate sales taxes from tables in the Form 1040 instructions. No further documentation is needed. If you choose to deduct actual sales tax expenses, you will need receipts. (This will almost surely be far more trouble than it's worth.) Other taxes are supported by Form W-2, estimated income tax payment forms, cancelled checks, receipts, and statements from a lending institution (for real estate taxes paid through your escrow account).

C. Interest payments (the mortgage will probably be the largest). Deductible items include: all interest on personal debts, penalties for paying off a mortgage before it is due, interest but not penalties on underpayment of taxes (be sure to note amount of interest on check). Sometimes part of the monthly maintenance fee for a condominium goes to pay interest on a mortgage held by the owners association. The association should indicate the interest cost on an annual statement. Interest on loans used to buy or carry tax-exempt bonds is not deductible, nor are late payment penalties on loans.

Categories That Can Be Transferred To *The Tax Advantage*: MORTGAGE INST/T (paid to financial institutions), MORTGAGE INDV/T (paid to individuals), INTEREST CRDT CARD/T, INTEREST EXPENSE/T.

Records To Keep: Annual or year-end statements listing interest paid to banks, S&Ls, and credit card companies; monthly revolving charge account statements, cancelled checks.

D. Charitable contributions. You may deduct contributions to organizations the IRS considers tax-exempt. This includes most charity agencies, religious organizations, nonprofit service groups, and government agencies such as universities. If you have any doubt whether an organization is tax-exempt, call your local IRS office. It's listed under U.S. Government in the white pages.

You may deduct contributions of cash or goods, such as clothing. The allowable deduction for goods is their market value in their used condition. If you donate property that would have produced a long-term capital gain if sold, you may usually deduct its full market value. However, the maximum deduction is reduced to 30% of gross adjusted income. (If you reduce the deduction by 40% of the increase in value, you can restore the 50% limit.) Don't donate depreciated property if selling it would produce a tax-

deductible loss. Sell the property, take the loss, donate the cash, and deduct that as well.

You may not deduct the value of your services, but you may claim actual expenses. (The new tax law, nearing passage at this writing, increases the mileage deduction to 12 cents from 9 cents.) The maximum permissible deduction for charitable contributions is 50% of your adjusted gross income.

Special rules apply if your contributions total more than 20% of your adjusted gross income.

Even if you do not itemize deductions, you may claim 25% of your first \$100 in charitable contributions (\$50, if you are married and file separate returns). Political contributions (which see) are not considered charitable. However, you may be able to claim a credit.

Consult IRS Publication 526, Charitable Contributions, if you have any doubts about any of these contributions.

Categories That Can Be Transferred To *The Tax Advantage*: CONTRIBUTIONS CASH/T for donations of less than \$3,000, CONTRIBUTIONS LRGE/T for contributions of more than \$3,000. Contributions of less than \$3,000 can be lumped together. For larger donations, the IRS wants specifics on line 17b of Schedule A.

Records To Keep: Cancelled checks and/or receipts showing amount, date, and name of charity. (The IRS prefers checks.) You may claim deductions without checks or receipts, but you may have trouble providing proof if you're audited. Keep an up-to-date log of contributions for which you do not have receipts and of expenses associated with donated services. If you donate property, such as clothes, books, or rummage, ask for a detailed receipt listing the items. In claiming the deduction, you must explain how the value was figured. For gifts worth more than \$200, a more detailed statement is required. See the instructions accompanying Form 1040.

E. Casualty and theft losses of nonbusiness property. You will be able to claim this deduction only in event of a substantial loss that is not covered by insurance, and even then record-keeping may be a hassle. You may deduct losses by natural causes, theft, or vandalism, only if the damage exceeds 10% of your adjusted gross income. For example, if your adjusted gross income is \$50,000, you cannot claim the first \$5,000 in losses. In addition, you must deduct \$100 from each incident of loss, as well as any insurance reimbursements.

Categories That Can Be Transferred To *The Tax Advantage*: None.

Records To Keep: Photographs of valuable possessions will help establish their value if they are stolen. Receipts showing purchase prices and dates of purchase, copies of police and insurance reports, proof of ownership, statements of market value before and after loss, statements of insurance reimbursements.

F. Miscellaneous expenses. Schedule A specifically lists union and professional dues and tax preparation fees under miscellaneous deductions. There is a wide variety of expenses you may list under "other." These include

rental of a safe deposit box for securities; professional tax advice; professional publications; safety equipment, small tools, and supplies required for your job; uniforms required by your employer, provided they are unsuitable to be worn away from work; protective clothing required for your work, such as hardhats and safety glasses; and physical examinations required by your employer.

The IRS is very particular about business use of your home. You may claim a deduction "only if you use that part exclusively and on a regular basis in your work and for the convenience of your employer."

Education expenses may also be deductible provided the education is required by your employer, the law, or regulations; is needed to keep your present salary; or relates to "maintaining or improving the skills you must have in your present position." Expenses would include tuition, fees, books, and supplies. You may not deduct education expenses related to meeting the minimum requirements of your job or finding a new job.

Categories That Can Be Transferred To *The Tax Advantage*: DUES/T, TAX RETURN PREP FEE/T, DEDUCTIONS MISC/T. Schedule A requires itemization, so you may prefer to use separate *Home Accountant* budget categories for each type of miscellaneous deduction. You would then itemize the totals manually on *The Tax Advantage*.

Records To Keep: Receipts and cancelled checks to support your *Home Accountant* records. They should indicate the purpose of the expenditure.

Is Your Computer Deductible?

The IRS is squeamish about deductions for home computers on the obvious and solid ground that playing Pac-Man is not a tax-deductible business activity. On the other hand, an accountant who works out of his home and uses his computer exclusively for his work has clearly purchased a piece of business equipment and may claim a deduction.

There are many shades of gray between Pac-Man and the accountant's business machine. The 1984 revisions of the tax law are intended to clamp down on people who use their computers only partly for deductible purposes. The changes were to be effective June 19, 1984. (The same rules apply to all office equipment.) "There was a general feeling that people bought computers more for personal than business use, but wrote off the entire computer as a deduction," Bernard M. Shapiro, national director of tax policy for Price Waterhouse, told *The New York Times*. Unfortunately, the new rules are neither simpler nor clearer than the old ones.

If you bought your computer for your home business and use it exclusively for that purpose, the law remains unambiguous. You have a choice of two ways to deduct the cost of the computer. You may still write off up to \$5,000 the year you buy the computer and depreciate any remainder over five years. The maximum first-year deduction rises to \$7,500 in 1988 and to \$10,000 in 1990. (The advance to \$7,500 had been scheduled for 1984.)

Plan B is to take a 10% investment tax *credit* for the computer and take accelerated depreciation over five years according to the following ACRS (Accelerated Cost Recovery System) tables. Use the schedule for the year you place the computer in service. (Once you begin depreciating, you do not change schedules.)

Year	1984	1985	1986
1	15%	18%	20%
2	22%	33%	32%
3	21%	25%	24%
4	21%	16%	16%
5	21%	8%	8%

Suppose you buy a \$3,000 computer for your business. If you expense the purchase (write off the entire purchase price the first year), you get an immediate \$3,000 deduction. That cashes out to \$1,500 if your tax bracket is 50%, \$1,200 if it is 40%, and so on. If you take the 10% tax credit of \$300 (which reduces your tax bill by that amount regardless of your tax bracket) and depreciate the computer over five years, your tax savings will be smaller the first year, but slightly larger in the long run. If you buy the computer in 1984, the deductions would be \$450 (plus the \$300 credit) in 1984, \$660 in 1985, and \$630 in each of the next three years.

For most people, especially those in relatively high tax brackets, deducting the full cost the first year is probably preferable, considering the time value of money. Buy something else next year.

If you use your computer exclusively for business, the rules are fairly simple, and the new rules, other than the delay in raising the amount you can write off the first year, will have little effect. If you plan to claim your computer as a deduction because you use it to manage your investments or because you use it for take-home work, the rules become curlier.

Under the new law, you may not claim a tax credit, unless 50% of your use of the computer is for business. (As before, you may claim a credit or depreciation in proportion to the percentage of time an asset is devoted to business use.) You may not deduct the use of your computer to manage investments at all unless you also meet the 50% business use test. Moreover, you must use straight-line depreciation over twelve years, if you do not meet the 50% test.

If you use your computer for take-home work from your job, there's bad news indeed: you will not be able to deduct your computer at all, unless your employer *requires* you to have it.

There's also bad news for everyone who mixes business with pleasure on a home computer. Beginning in 1985, you'll have to keep a log to document the proportion of time the computer is dedicated to business use. This is liable to be nearly impossible for people whose kids are heavily into computer games and for those who use their computer daily for a variety of fun and work.

The rules governing deductions for software are also confusing. Generally, business programs purchased with the computer are considered part of the system and are lumped together with the computer for whatever tax treatment the machine gets. If you purchase software separately, however, you must depreciate it over five years (at 20% per year), and the investment tax credit is not available. There is also uncertainty about what types of programs are deductible. A game clearly is not, while an investment program is clearly an investment expense, provided you use it for that purpose. Other programs fall in the middle. At this writing, for example, there is no consensus among accountants whether *The Home Accountant* and similar programs are deductible. In addition, the IRS was re-examining the question of whether software should be eligible for accelerated depreciation.

Incidentally, computer paper, printer ribbons, and so forth are deductible under the same rules as other office supplies.

The rules for claiming deductions for home computers are complicated and confusing. If you have any doubts, the best advice is to consult a tax professional.

Special Tax Calculations

To add to the complexities of Form 1040 and related schedules, there are several special methods of figuring taxes that apply in certain circumstances. If you have significant income from which taxes are not withheld, you must pay estimated taxes during the year in lieu of withholding. If you have a substantial jump in income one year, income averaging may reduce your tax liability. Finally, you may be subject to the Alternative Minimum Tax, if you have a sizeable income and take advantage of certain tax breaks, such as capital gains distributions and accelerated depreciation on business property.

Estimated Tax

If you are self-employed or have more than a small amount of income from which tax is not withheld, you must make estimated tax payments. You may pay all of your estimated tax on April 15, a full year before you file your final return, or in installments on April 15, June 15, September 15, and January 15. Notice that the first and last payments come fifteen days after the close of the first and last quarters, but that the middle two payments do not coincide with standard fiscal quarters.

You must pay at least 80% of the taxes you owe in these installments. Otherwise you will be subject to a penalty. (The penalty is determined semiannually and is based on the average prime rate for the previous period.) You will not be penalized as long as you pay at least as much tax as you paid the previous year. However, as a matter of sound financial planning, you should figure your tax as accurately as you are able, lest you be stuck with a whopping surprise payment when you file your return.

Most self-employed people are well aware of estimated tax payments. Others may be liable for estimated taxes without realizing it. You must pay the tax on any income that is not subject to withholding. This may include capital gains, interest, dividends, tips, or self-employment income you earn in addition to your regular salary. The Lassiters, for example, would have had to pay estimated taxes on Susan's free-lance income, if her purchase of a computer had not put her in the red.

As of 1984, you must make estimated tax payments if your next tax return will show that you owe more than \$400 in additional taxes *and* either of the following (these instructions closely follow the IRS's wording):

- 1) you expect your gross income to include more than \$500 from sources other than wages subject to withholding; or
- 2) your gross income will be more than:
 - \$20,000, if you are single, a head of household, or a qualifying widow or widower;
 - \$20,000, if you are married and can make joint estimated tax payments, and your spouse has not received wages for the year;
 - \$10,000, if you are married and can make joint estimated tax payments, and both of you have received wages for 1984;
 - \$5,000, if you are married and cannot make joint estimated tax payments. (You may, for example, be separated or have different tax years.)

The procedure for calculating estimated taxes is essentially the same as filling out Form 1040. The 1984 estimated tax form, Form 1040-ES, is shown in Figure 7-4. *The Tax Advantage* will be useful for calculating your taxable income. If the tax rates have changed, as they did between 1983 and 1984, however, you must use the new tables that come with 1040-ES. DO NOT USE *The Tax Advantage's* tax calculation if the rates have changed. The tables for 1984 are shown in Figure 7-2.

Income Averaging

Income averaging may reduce your taxes if you have a sudden boost to your income. The source of the increase is not important. It could be a capital gain from the sale of a residence, a large bonus, a large increase in dividend and interest income after an inheritance, or a lucky turn of the roulette wheel. Whatever. Such an increase is likely to push you into a higher tax bracket. Income averaging will treat a part of your increased income as if you received it in equal installments over five years. The tax is not deferred, but your tax rate will be reduced.

The 1984 tax law makes it more difficult to qualify for income averaging and reduces the benefits if you do. Previously, your averageable income was your current taxable income less 120% of your average taxable income for the previous four years. (On the form, you actually figured the total taxable income for the last four years and multiplied it by .30, but that comes out to

the same thing as 120% of the average.) Under the new law, you may not use income averaging unless your current year's taxable income exceeds 140% of the average for the previous four years.

Your tax returns for the previous four years are the basis for income averaging. If you don't have them, you can get them from the IRS by filling out Form 4506, Request for Copy of Tax Form. There is a fee of \$5 per return.

Calculating your taxable income for the four-year base period is fairly straightforward if your marital status has not changed. Be careful to follow the directions, though. The method of calculating personal exemptions changed in 1981, and it will affect your taxable income. If your marital status has changed in the past four years, the rules for figuring base-period income are too complicated to explain here. Consult IRS Publication 506, *Income Averaging*.

INCOME AVERAGING

*** SCHEDULE G - INCOME AVERAGING ***

JOHN BROWN
MARY BROWN

SSN:111-111-111
SSN:222-222-222

> INCOME FOR '79-'82 <

1	1979 TAXABLE INCOME	1	16,333
2	1979 EXEMP. * \$1000	2	2,000
3	SUBTRACT	3	14,333
4	1980 TAXABLE INCOME	4	12,600
5	1980 EXEMP. * \$1000	5	3,000
6	SUBTRACT	6	9,600
7	1981 TAXABLE INCOME	7	8,020
8	1982 TAXABLE INCOME	8	13,699
9	EARNED OUTSIDE U.S.	9	10,300
10	ADD	10	55,952

> 2-AVERAGEABLE INCOME <

11	30% OF LINE 10.	11	16,786
12	'83 TAXABLE INCOME.	12	37,900
13	ADJUST. FOR DISTR.	13	0
14	SUBTRACT	14	37,900
15	SEE INSTRUCTIONS.	15	0
16	SUBTRACT	16	37,900
17	FROM LINE 11.	17	16,786
18	AVERAGEABLE INCOME.	18	21,114

> 3-TAX <

19	20% OF LINE 18.	19	4,223
20	FROM LINE 11.	20	16,786
21	ADD	21	21,009
22	FROM LINE 15.	22	0
23	ADD	23	21,009
24	TAX ON LINE 23.	24	2,830
25	TAX ON LINE 21.	25	2,830
26	TAX ON LINE 20.	26	1,995
27	SUBTRACT	27	835
28	LINE 27 * 4	28	3,340
29	TAX ON LINE 12.	29	0
30	TAX ON LINE 14.	30	0
31	SUBTRACT	31	0
32	TAX	32	6,170

Figure 7-5: Income averaging saved John and Mary Brown more than \$1,500 in taxes for 1983. This example, concocted by the IRS and transferred to *The Tax Advantage*, is a bit exotic, but it makes the point. The 1984 tax law made it more difficult to qualify for income averaging and reduced the benefits. To qualify, your taxable income now must be 140% of your average for the previous four years.

The Tax Advantage will make income averaging very much easier. **WARNING:** Because of the change in the tax law, you cannot use earlier versions of the program even to determine whether it will be profitable to use income averaging for the 1984 tax year or later.

Schedule G (Form 1040) Department of the Treasury Internal Revenue Service	Income Averaging ▶ See instructions on back. ▶ Attach to Form 1040.	OMB No. 1545-0074 <div style="font-size: 2em; font-weight: bold;">1983</div> <div style="font-size: 1.5em; font-weight: bold;">17</div>
Name(s) as shown on Form 1040: JOHN AND MARY BROWN		Your social security number: 111 11 1111

Step 1 Figure your income for 1979—1982

1979	1 Fill in the amount from your 1979 Form 1040 (line 34) or Form 1040A (line 11)	1	SEE SEPARATE STATEMENT		
	2 Multiply your total exemptions in 1979 by \$1,000	2	STATEMENT		
	3 Subtract line 2 from line 1. If less than zero, enter zero	3		14,333	
1980	4 Fill in the amount from your 1980 Form 1040 (line 34) or Form 1040A (line 11)	4	12,600		
	5 Multiply your total exemptions in 1980 by \$1,000	5	3,000		
	6 Subtract line 5 from line 4. If less than zero, enter zero	6		9,600	
1981	7 Fill in the amount from your 1981 Form 1040 (line 34) or Form 1040A (line 12). If less than zero, enter zero	7		8,020	
1982	8 Fill in the amount from your 1982 Form 1040 (line 37), Form 1040A (line 16), or Form 1040EZ (line 7). If less than zero, enter zero	8		13,699	
Total	9 Fill in all income less deductions earned outside of the U.S. or within U.S. possessions and excluded for 1979 through 1982 (include housing exclusion in 1982)	9		10,300	
	10 Add lines 3, 6, 7, 8 and 9	10		55,952	

Step 2 Figure your averageable income

Multiply the amount on line 10 by 30% (.30)		x .30	
11 Write in the answer	11		16,786
12 Fill in your taxable income for 1983 from Form 1040, line 37	12		37,900
13 If you received a premature or excessive distribution subject to a penalty under section 72, see instructions	13		
14 Subtract line 13 from line 12	14		37,900
15 If you live in a community property state and are filing a separate return, see instructions	15		
16 Subtract line 15 from line 14. If less than zero, enter zero	16		37,900
17 Write in the amount from line 11 above	17		16,786
18 Subtract line 17 from line 16. This is your averageable income	18		21,114

If line 18 is \$3,000 or less, do not complete the rest of this form. You do not qualify for income averaging.

Step 3 Figure your tax

Multiply the amount on line 18 by 20% (.20)		x .20	
19 Write in the answer	19		4,223
20 Write in the amount from line 11 above	20		16,786
21 Add lines 19 and 20	21		21,009
22 Write in the amount from line 15 above	22		
23 Add lines 21 and 22	23		21,009
24 Tax on amount on line 23 (from Tax Rate Schedule X, Y, or Z)	24		2,830
25 Tax on amount on line 21 (from Tax Rate Schedule X, Y, or Z)	25	2,830	
26 Tax on amount on line 20 (from Tax Rate Schedule X, Y, or Z)	26	1,995	
27 Subtract line 26 from line 25	27	835	
Multiply the amount on line 27 by 4		x 4	
28 Write in the answer	28		3,340
<i>If you have no entry on line 13, skip lines 29 through 31 and go to line 32.</i>			
29 Tax on amount on line 12 (from Tax Rate Schedule X, Y, or Z)	29		
30 Tax on amount on line 14 (from Tax Rate Schedule X, Y, or Z)	30		
31 Subtract line 30 from line 29	31		
32 Add lines 24, 28, and 31. Write the result here and on Form 1040, line 38. Be sure to check the Schedule G box on that line	32		6,170

For Paperwork Reduction Act Notice, see Form 1040 instructions. **NOT SHOWN** Schedule G (Form 1040) 1983

Figure 7-6: This is how the IRS filled out Schedule G for the example given in Figure 7-5. *The Tax Advantage*, of course, got the same answer.

The Lassiters had no dramatic increase in income in 1983, so they did not qualify for income averaging. Figure 7-5 shows an IRS example of income averaging transferred to *The Tax Advantage*. Figure 7-6 is the way IRS filled out the form. (Surprise! *The Tax Advantage* and the IRS got the same answer.) The example is slightly zany. John and Mary Brown's income jumped to \$37,900 in 1983 from an average of \$13,988 for 1979 through 1982. They also had excluded \$10,300 of income earned outside the United States. Because of the huge increase in income, their tax savings from income averaging is dramatic: \$1,408. Their tax is \$6,170, compared with \$7,578 without income averaging.

(At this writing, neither the 1984 version of the program nor the new IRS forms are available. The exercise is simply a demonstration of how income averaging works. Under the new law, the calculation is done basically the same way, but the formulas are altered by the decrease in eligible income.)

Alternative Minimum Tax

If you've been adventurous with your tax strategies, the tax law may take back some of the tax breaks it would ordinarily give you. Extensive use of long-term capital gains, accelerated depreciation, oil depletion allowances, and other tax shelter goodies may invoke the Alternative Minimum Tax. Congress passed the AMT, because it was concerned that some well-to-do taxpayers had become so adept at legal tax avoidance that they weren't paying their share. If you're subject to the AMT, you've probably already ventured beyond the realm of do-it-yourself tax preparation. (And you probably should seek professional advice on both taxes and investments, if you haven't already.) The main purpose of this section is to serve as a warning, if you may be nearing the AMT zone.

You should be aware of the AMT if you have a substantial income above \$40,000 (\$30,000, if you're single) that is sheltered by tax breaks. The AMT is not apt to kick in, unless the total of your tax preference items is nearly as large as your taxable income figured on Form 1040. For example, the Lassiters would not even come close to triggering the AMT, even if they sold their house, realizing a sizeable capital gain. (See "Tax Implications of Buying and Selling Your Home.") The tax is for high rollers and special circumstances.

Basically, you start with your regular adjusted gross income, subtract limited regular deductions, then add tax preference items. You then subtract \$40,000 (\$30,000, if you're single) and multiply the result by 20%. You are subject to the AMT, only if this figure is more than your tax figured the regular way on Form 1040.

If you're subject to the AMT, then, your total tax bill can be no *more* than 20% of your income, plus tax preference items, above \$40,000 (\$30,000, if you're single), so it's a relatively gentle touch. still, the taxman giveth, and the taxman taketh away. (To paraphrase Mark Twain: The Internal Revenue Code is like the peace of God. It passeth understanding. See your adviser—tax, not spiritual.)

The work sheet in Figure 7-7 will allow you to figure out whether you may be subject to the AMT. Figure 7-8 is Form 6251, filled out by the IRS for its example of a couple subject to the AMT. Notice that the sum of the Smiths' tax preference items is larger than their adjusted gross income on Form 1040. Their taxable income on Form 1040, prepared on *The Tax Advantage*, (Figure 7-9) is only \$33,400.

COMPUTING ALTERNATIVE MINIMUM TAX

1. Adjusted gross income.....	_____
2. 60 percent capital gain exclusion.....	_____
3. Discount received on incentive stock options.....	_____
4. Tax shelters (Include difference between accelerated depreciation and straight-line depreciation, oil and gas depletion allowances, R&D, mining exploration, intangible drilling costs, etc.).....	_____
5. Total.....	_____
6. Deduct:	
Medical deductions less 10 percent AGI.....	_____
Home mortgage.....	_____
Charitable Contributions.....	_____
Exclusion (\$40,000 if married filing jointly; \$30,000 if single).....	_____
7. Deductions plus exclusion.....	_____
8. Amount subject to AMT (Line 4 minus Line 6).....	_____
9. Alternative minimum tax (20 percent Line 7).....	_____
10. Regularly computed tax from <u>The Tax Advantage</u> (or Form 1040).....	_____
11. AMT less regular tax (Line 8 minus Line 9).....	_____

Figure 7-7: AMT Alert. This is an abbreviated version of the IRS AMT computation form, to be used to determine whether you might be subject to the AMT. If your regular tax from *The Tax Advantage* or Form 1040 is larger than the indicated AMT, then you are not subject to the AMT. Notice that only medical expenses above 10% of adjusted gross income are allowed, whereas the exclusion is 5% on Form 1040. This form omits several items on the IRS form. If it appears you may be near the AMT cutoff, you should fill out the full form.

Alternative Minimum Tax Computation

▶ Attach to Forms 1040, 1040NR, 1041 or 990-T (Trust).

OMB No. 1545-0227

1983
33

Name(s) as shown on tax return

FRANK AND MARY SMITH

Identifying number

222-22-2222

1 Adjusted gross income from Form 1040, or Form 1040NR, line 33 (estates and trusts, see instructions)	1	48,000
2 Deductions (estates and trusts, see instructions):		
a (1) Medical and dental expense from Schedule A, line 7	2a(1)	1,600
(2) Multiply Form 1040, line 33 by 5% (.05)	2a(2)	2,400
(3) Subtract line 2a(2) from line 2a(1). (If less than zero, enter zero)	2a(3)	-0-
b Contributions from Schedule A, line 20	2b	2,300
c Casualty and theft losses from Schedule A, line 21	2c	
d Interest expense on property used as a residence from Schedule A, line 13	2d	6,200
e (1) Interest, other than line 2d above, from Schedule A, line 16	2e(1)	
(2) Net investment income	2e(2)	
(3) Enter the smaller of line 2e(1) or line 2e(2)	2e(3)	
f Gambling losses to the extent of gambling winnings from Schedule A, line 24	2f	
g Estate tax allowable under section 691(c) from Schedule A	2g	
h Add lines 2a(3), b, c, d, e(3), f, and g	2h	8,500
3 Subtract line 2h from line 1	3	39,500
4 Tax preference items:		
a All-savers interest exclusion, and dividend exclusion	4a	700
b 60% capital gain deduction	4b	21,600
c Accelerated depreciation on nonrecovery real property or 15-year real property	4c	5,000
d Accelerated depreciation on leased personal property or leased recovery property other than 15-year real property	4d	
e Amortization of certified pollution control facilities	4e	5,000
f Mining exploration and development costs	4f	
g Circulation and research and experimental expenditures	4g	
h Reserves for losses on bad debts of financial institutions	4h	
i Depletion	4i	17,000
j Incentive stock options	4j	
k Intangible drilling costs	4k	
l Add lines 4a through 4k	4l	49,300
5 Alternative minimum taxable income (add lines 3 and 4(l)) (short period returns, see instructions)	5	88,800
6 Enter: \$40,000, if married filing joint return or surviving spouse \$30,000, if single or head of household \$20,000, if married filing separate return or estate or trust	6	40,000
7 Subtract line 6 from line 5. If zero or less, do not complete the rest of this form	7	48,800
8 Enter 20% of line 7	8	9,760
9 Amount from Form 1040, line 49 or Form 1040NR, line 51 (Do not include Form 1040, line 39 or 1040NR, line 42.) (estates and trusts, see instructions)	9	6,092
10 Subtract line 9 from line 8. If zero or less, enter zero	10	3,668
11 Foreign tax credit	11	
12 Alternative minimum tax (subtract line 11 from line 10). Enter on Form 1040, line 51, Form 1040NR, line 52, Form 1041, line 32, or Form 990-T, page 1, line 14	12	3,668

Figure 7-8: Large capital gains and tax shelters trigger the Alternative Minimum Tax. In this example, conjured up by the IRS, Frank and Mary Smith lose \$3,668 of their tax breaks. The largest are a capital gain and an oil depletion allowance deduction.

ALT. MIN. TAX

*** FORM 1040 U.S. INDIVIDUAL INCOME TAX RETURN 1983 ***

FRANK SMITH
MARY SMITH

SSN:111-111-111
SSN:222-222-222

555 ARCADIA ST.
ST. LOUIS, MO 33333

YOUR OCCUPATION : BUSINESSMAN
SPOUSE'S OCCUPATION : HOMEMAKER

> FILING STATUS <

1. ☐ SINGLE
2. ☒ MARRIED FILING JOINT RETURN
3. ☐ MARRIED FILING SEPARATE RETURN
4. ☐ HEAD OF HOUSEHOLD
5. ☐ QUALIFYING WIDOW(ER)

> EXEMPTIONS <

- 6A ☒-YOURSELF ☐-65 OR OVER ☐-BLIND NUMBER CHECKED
6B ☒-SPOUSE ☐-65 OR OVER ☐-BLIND ON 6A AND B. . [2]
6C NUMBER OF YOUR DEPENDENT CHILDREN WHO LIVED WITH YOU [2]
6D NUMBER OF OTHER DEPENDENTS [0]
6E TOTAL NUMBER OF EXEMPTIONS CLAIMED [4]

> INCOME <

7	WAGES	7	40,000
8	INTEREST INCOME [B]	8	0
9A	DIVIDENDS [B]	9A	3,800 I
9B	EXCLUSION	9B	200
9C	SUBTRACT	9C	3,600
10	TAX REFUNDS	10	0
11	ALIMONY RECEIVED	11	0
12	BUSINESS [C]	12	-10,000 I
13	CAPITAL GAIN [D]	13	14,400 I
14	40% CAP. GAIN DISTR.	14	0
15	SUPPLEMENTAL GAINS	15	0
16	FULLY TAXABLE PENS.	16	0
17A	OTHER PENSIONS	17A	0
17B	TAXABLE AMOUNT	17B	0
18	SUPPLEMNT. INCOME [E]	18	0
19	FARM INCOME	19	0
20A	UNEMPLOYMENT COMPEN.	20A	0
20B	TAXABLE AMOUNT	20B	0
21	OTHER INCOME	21	0
22	TOTAL INCOME	22	48,000

> ADJUST. TO INCOME <

23	MOVING EXPENSE	23	0
24	EMPLY. BUS. EXP.	24	0
25A	IRA	25A	0
25B	PAYMENTS IN 1984	25B	0
26	KEOGH	26	0
27	INTEREST PENALTY	27	0
28	ALIMONY PAID	28	0
29	MARRIED COUPLE [W]	29	0
30	DISABILITY EXCLUS.	30	0
31	TOTAL ADJUSTMENTS	31	0

ALT. MIN. TAX

*** FORM 1040 U.S. INDIVIDUAL INCOME TAX RETURN 1983 ***

FRANK SMITH
MARY SMITHSSN:111-111-111
SSN:222-222-222

> ADJUST. GROSS INCOME <

32 ADJUSTED GROSS. 32 48,000

> TAX COMPUTATION <

33	FROM LINE 32.	33	48,000
34A	DEDUCTIONS [A].	34A	10,600
34B	ALLOW. CHAR. CONTR.	34B	0
35	SUBTRACT.	35	37,400
36	EXEMPTIONS * \$1000.	36	4,000
37	TAXABLE INCOME.	37	33,400
	INCOME AVERAGE [G].		
38	TAX.	38	6,092 T
39	ADDITIONAL TAXES.	39	0
40	TOTAL.	40	6,092

> CREDITS <

41	ELDERLY.	41	0
42	FOREIGN TAX.	42	0
43	INVESTMENT.	43	0
44	POLITICAL CONTRIB.	44	0
45	DEPENDENT CARE.	45	0
46	JOBS CREDIT.	46	0
47	RESIDENTIAL ENERGY.	47	0
48	TOTAL CREDITS.	48	0
49	BALANCE.	49	6,092

> OTHER TAXES <

50	SELF EMPLOYMENT [SE].	50	0
51	ALT. MINIMUM TAX.	51	0
52	RECAP. INVEST. CREDIT.	52	0
53	SOC. SEC. TAX ON TIP.	53	0
54	UNCOLL. TAXES ON TIP.	54	0
55	IRA.	55	0
56	TOTAL TAX.	56	6,092

> PAYMENTS <

57	FED. TAX WITHHELD.	57	0
58	ESTIMATED TAX PAYM.	58	0
59	EARNED INCOME CREDIT.	59	0
60	FORM 4868.	60	0
61	EXCESS FICA & RRTA.	61	0
62	CRDT. FOR TAX ON FUEL.	62	0
63	REG. INVEST. CO.	63	0
64	TOTAL.	64	0
65	* OVERPAID *.	65	0
66	REFUNDED TO YOU.	66	0
67	APPLIED TO 1984.	67	0
68	* AMOUNT YOU OWE *.	68	6,092

Figure 7-9: The Smiths' Form 1040, prepared on *The Tax Advantage*, shows they would owe only \$6,092, if it were not for the Alternative Minimum Tax. Note that *The Tax Advantage* warns you that you have triggered the AMT.

Alternative Minimum Tax Computation

▶ Attach to Forms 1040, 1040NR, 1041 or 990-T (Trust).

OMB No. 1545-0227

1983
33

Name(s) as shown on tax return

Identifying number

1 Adjusted gross income from Form 1040, or Form 1040NR, line 33 (estates and trusts, see instructions)		1
2 Deductions (estates and trusts, see instructions):		
a (1) Medical and dental expense from Schedule A, line 7	2a(1)	
(2) Multiply Form 1040, line 33 by 5% (.05)	2a(2)	
(3) Subtract line 2a(2) from line 2a(1). (If less than zero, enter zero)	2a(3)	
b Contributions from Schedule A, line 20	2b	
c Casualty and theft losses from Schedule A, line 21	2c	
d Interest expense on property used as a residence from Schedule A, line 13	2d	
e (1) Interest, other than line 2d above, from Schedule A, line 16	2e(1)	
(2) Net investment income	2e(2)	
(3) Enter the smaller of line 2e(1) or line 2e(2)	2e(3)	
f Gambling losses to the extent of gambling winnings from Schedule A, line 24	2f	
g Estate tax allowable under section 691(c) from Schedule A	2g	
h Add lines 2a(3), b, c, d, e(3), f, and g	2h	
3 Subtract line 2h from line 1	3	
4 Tax preference items:		
a All-savers interest exclusion, and dividend exclusion	4a	
b 60% capital gain deduction	4b	
c Accelerated depreciation on nonrecovery real property or 15-year real property	4c	
d Accelerated depreciation on leased personal property or leased recovery property other than 15-year real property	4d	
e Amortization of certified pollution control facilities	4e	
f Mining exploration and development costs	4f	
g Circulation and research and experimental expenditures	4g	
h Reserves for losses on bad debts of financial institutions	4h	
i Depletion	4i	
j Incentive stock options	4j	
k Intangible drilling costs	4k	
l Add lines 4a through 4k	4l	
5 Alternative minimum taxable income (add lines 3 and 4(l)) (short period returns, see instructions)	5	
6 Enter: \$40,000, if married filing joint return or surviving spouse \$30,000, if single or head of household \$20,000, if married filing separate return or estate or trust	6	
7 Subtract line 6 from line 5. If zero or less, do not complete the rest of this form	7	
8 Enter 20% of line 7	8	
9 Amount from Form 1040, line 49 or Form 1040NR, line 51 (Do not include Form 1040, line 39 or 1040NR, line 42.) (estates and trusts, see instructions)	9	
10 Subtract line 9 from line 8. If zero or less, enter zero	10	
11 Foreign tax credit	11	
12 Alternative minimum tax (subtract line 11 from line 10). Enter on Form 1040, line 51, Form 1040NR, line 52, Form 1041, line 32, or Form 990-T, page 1, line 14	12	

Instructions

(Section References are to the Internal Revenue Code)

Paperwork Reduction Act Notice.—We ask for this information to carry out the Internal Revenue laws of the United States. We need it to ensure that taxpayers are complying with these laws and to allow us to figure and collect the right amount of tax. You are required to give us this information.

Purpose of Form.—Use this form to figure your alternative minimum tax, but file it only if you are liable. Individuals, estates or trusts may be liable if they have any tax preference items listed on line 4 or adjusted gross income of more than line 6.

If you made an election under section 58(i), enter zero on lines 4f, 4g, and 4k.

Minimum Tax Deferred From Earlier Year(s).

—If a net operating loss carryover from an earlier year(s) reduces taxable income for 1983, and the net operating loss giving rise to the carryover resulted in the deferral of minimum tax in that earlier year(s), all or part of the deferred minimum tax may be includible as tax liability for 1983. Figure the deferred minimum tax at 15% and complete and attach a 1982 Form 6252, Computation of Minimum Tax—Individuals, lines 14 through 18. You may attach a schedule following the format of Form 4625. Enter the amount from line 18 on Form 1040, line 51, or Form 1041, line 32 and write "Form 4625."

Partners, Beneficiaries, etc.—If you are a:

(1) Partner or shareholder of an S corporation, take into account separately your distributive

share of items of income and deductions that enter into the computation of tax preference items.

(2) Beneficiary of an estate or trust, see section 58(c).

(3) Participant in a common trust fund, see section 58(e).

(4) Shareholder or holder of beneficial interest in a regulated investment company or a real estate investment trust, see section 58(f).

Carryback and Carryover of Unused Credits.—It may be necessary to figure the carryback or carryover of unused credits. See section 55(c)(3).

(Continued on back)

Form **6251** (1983)

Figure 7-10: Here's the AMT form, if you want to figure your own.

The Year-End Tax Shuffle

Salary earners and modest investors probably will not be able to do a great deal of income and asset shuffling at year-end to reduce their taxes, but even a tadpole can wiggle a little. The tax planning feature of *The Tax Advantage* will quickly calculate the result of your tax strategies and refigure your marginal tax rate.

An IRA or Keogh plan is probably the first thing to consider, particularly if it appears that your tax bill will be large. Actually, if the funds are available earlier in the year, it makes little sense to wait until the end of the year to set aside money in a tax-deferred retirement plan. The sooner you place the money in the retirement account, the sooner the interest or dividends become tax-free. If you're using *The Tax Advantage*, just plug in the amount of your IRA or Keogh contribution on Line 25A, 25B, or 26 of Form 1040.

Marriages and divorces can have significant tax implications. Your marital status as of December 31 will determine whether you pay taxes as two single people or as a married couple. For one-income couples, the tax bill will probably be lower, if you are married; you will save, if you marry before year's end or delay divorce or legal separation until after New Year's. (State laws determine whether you are married, divorced, or legally separated.) The opposite usually applies for two-income couples; delaying marriage or accelerating a divorce will probably result in a tax savings. In most cases, personal considerations will outweigh financial ones, but, if your choice is between December and January, you might want to take taxes into account. *The Tax Advantage* will allow you quickly to figure your taxes as two singles and as a married couple.

Usually, but not always, it will be to your advantage to accelerate deductions and to defer income. Salary earners usually cannot sneak their last paycheck into next year. The IRS considers your paycheck yours, when you receive it or when the money is set aside for you. Thus, you cannot defer income by waiting to cash the check or by asking your employer to defer payment until after the first of the year. If you are self-employed, however, you may be able to delay income simply by sending bills a little later.

It's conceivable that you'll want to pay taxes on income this year rather than next. This may save taxes in the long run, if you expect a substantial increase in income next year or if marriage will place you in a higher tax bracket. Especially if you have self-employment income, you may also profit by collecting income early, if your income is above the maximum taxable amount for Social Security, but may not be next year. (In 1984, Social Security tax takes 11.3% off the top of your self-employment income. Both the rate and maximum taxable income go up every year.) While you're working on Form 1040 on *The Tax Advantage*, just press T to find your marginal tax rate and assess the effect of moving income from one year to another.

If you are active in the securities markets, you may be able to play gains and losses off against each other. Remember that it takes \$2 in long-term losses to

offset \$1 in ordinary income and that long-term gains are taxed at a maximum rate of 20%. You must take brokerage fees into account. The smaller the transaction, the more likely commissions will offset the tax benefits of the transaction. Remember, also, that you can use capital losses to offset gains, but that you may not deduct more than \$3,000 in capital losses against ordinary income in a single year. Larger losses against ordinary income must be carried forward to the next year.

There are four situations you might find yourself in at the end of the year:

- **Long-term gains and long-term losses:** No harm done. You lose the tax advantage of long-term gains, but the net result is the same as counting long-term losses against ordinary income.
- **Short-term gains and short-term losses:** Again, a wash. The tax advantage of short-term losses cancels the disadvantage of short-term gains.
- **Short-term gains and long-term losses.** Great. The tax disadvantages of both are eliminated. You might even want to take long-term losses near the end of the year to offset short-term gains.
- **Long-term gains and short-term losses.** Avoid this one if you can. You lose the tax advantages of both. Investment advisers warn against timing investment decisions on the basis of tax consequences alone, but you might consider not taking the long-term gains until the next year, if there is little danger of losing them.

The Tax Advantage will figure the tax effects of playing gains against losses. If you're considering making transactions for tax purposes, you might experiment a bit with the program to help with the decision. Figure 7-11 shows a short-term loss offsetting a long-term gain on Schedule D. (The stock prices are hypothetical, but the 1983 figures are close to actual.) This is a terrible tax strategy, but sometimes other considerations override tax concerns. In the example given, taking the loss on Apple Computer also turned out to be a terrible investment strategy. The Smiths managed to get out just about at the bottom of the market. Maybe they thought the Macintosh was going to be a bust. (Apple later rose to the 30s but, at this writing, had sagged back to the mid-20s.)

The Internal Revenue Code does not treat commissions as deductible expenses. You cannot write off commissions while you hold a stock. Instead, you deduct commissions from your basis and sale price in calculating capital gains. This has the effect of writing the commissions off against your capital gains, rather than your ordinary income.

You cannot realize a tax loss by selling shares at a loss, then replacing them with similar shares. These are called "wash" sales, and their net effect is zilch, other than the commissions you pay your broker. The IRS is on to the trick. To avoid having a wash sale count as a non-transaction for tax purposes, you must buy the replacement shares more than thirty-one days before or after the sale of your original shares. For example, you can "double up" by buying the replacement shares thirty-one days before you sell your old ones. If you

*** SCHEDULE D - CAPITAL GAINS AND LOSSES ***

FRANK SMITH
MARY SMITH

SSN:111-111-111
SSN:222-222-222

> I-SHORT TERM <

1	SHORT-TERM ASSETS	1		I
1F	LOSS.	1F	2,702	
1G	GAIN.	1G	0	
2	SALE OF RESIDENCE	2	0	
3	INSTALLMENT SALES	3	0	
4F	LOSS FROM PARTN.	4F	0	
4G	GAIN FROM PARTN.	4G	0	
5F	TOTAL LOSS.	5F	2,702	
5G	TOTAL GAIN.	5G	0	
6	COMBINE LINE 5.	6	-2,702	
7	CARRYOVER AFTER '69	7	0	
8	NET GAIN OR LOSS.	8	-2,702	

> II-LONG TERM <

9	LONG-TERM ASSETS.	9		I
9F	LOSS.	9F	0	
9G	GAIN.	9G	3,631	
10	SALE OF RESIDENCE	10	0	
11	INSTALLMENT SALES	11	0	
12F	LOSS FROM PARTN.	12F	0	
12G	GAIN FROM PARTN.	12G	0	
13F	TOTAL LOSS.	13F	0	
13G	TOTAL GAIN.	13G	3,631	
14	COMBINE LINE 13	14	3,631	
15	CAPITAL GAIN DISTR.	15	0	
16	FORM 4797	16	0	
17	COMBINE	17	3,631	
18	CARRYOVER AFTER '69	18	0	
19	NET GAIN OR LOSS.	19	3,631	

> III-SUMMARY <

20	COMBINE 8 & 19.	20	929
21	COMPUTED.	21	929
22	60% OF LINE 20.	22	557
23	CAPITAL GAIN.	23	372
24	COMPUTED.	24	0
25	CAPITAL LOSS.	25	0

> V-POST '69 CARRYOVER <

> SHORT-TERM <

26	LOSS ON LINE 8.	26	0
27	GAIN ON LINE 19	27	0
28	COMBINE 26 AND 27	28	0
29	SMALLER OF 25 & 28.	29	0
30	CARRYOVER	30	0

> LONG-TERM <

31	SUBTR. 29 FROM 25	31	0
32	LOSS FROM 19.	32	0
33	GAIN FROM 8	33	0
34	COMBINE 32 AND 33	34	0
35	LINE 31 TIMES 2	35	0
36	CARRYOVER	36	0

Figure 7-11 continues next page

*** SCHEDULE D - CAPITAL GAINS AND LOSSES ***

FRANK SMITH
MARY SMITH

SSN:111-111-111
SSN:222-222-222

LINE 1 SHORT-TERM ASSETS . . 1 -2,702

ITEM 1 OF 1

DESCRIPTION : 100 SHARES APPLE
DATE ACQUIRED : 7-1-83
DATE SOLD : 10-1-83
NET SALES PRICE: 2173
COST OR BASIS : 4875
LOSS : 2702
GAIN : 0

*** SCHEDULE D - CAPITAL GAINS AND LOSSES ***

FRANK SMITH
MARY SMITH

SSN:111-111-111
SSN:222-222-222

LINE 9 LONG-TERM ASSETS. . . 9 3,631

ITEM 1 OF 1

DESCRIPTION : 100 SHARES IBM
DATE ACQUIRED : 9-1-80
DATE SOLD : 10-3-83
NET SALES PRICE: 12763
COST OR BASIS : 9132
LOSS : 0
GAIN : 3631

Figure 7-11: *The Tax Advantage* will calculate your capital gains and losses. You might want to use it to weigh the tax implications of your investment decisions before you act. In this example, Frank and Mary Smith bought 100 shares of Apple Computer stock on August 1, 1983, at 49% (and paid \$87.70 in commissions). They got out three months later at 22¼ (less \$52 in commissions). Perhaps smarting from the loss, they then took a long-term gain on IBM. In hindsight, the Apple maneuver was a terrible strategy. They bought when Apple was plummeting from a peak and sold at the bottom, taking a short-term loss that cancelled the tax advantages of their long-term gain on IBM. Maybe they had high hopes for the Macintosh, then lost faith.

want to take a long-term gain on a stock, you can sell short at year-end. (This is simply selling stock borrowed from your broker.) The gain won't be taxable until you replace the broker's shares with your own early the next year.

There are, however, some types of year-end securities swaps that realize a loss without significantly changing your investment. The most common tax swap involves bonds. Suppose you own bonds with a face value of \$10,000, paying 7% interest. Since interest is now higher, the market value of the bonds will be depressed. If bonds of comparable quality are now paying 12% interest, your bonds may be worth less than \$6,000, so that their yield will be competitive. Since the rise in interest rates is the only reason the value of your bond is depressed, other bonds of similar quality, maturity, and yield will be selling for about the same price. The IRS will not allow the loss, if you sell your bond and buy an identical one. But, if you sell your bond and buy a similar (but different) one, you will realize the loss without significantly changing your investment. Don't forget to take commissions into account in deciding whether the maneuver is profitable.

You can make the same sort of tax swap with stocks, but it may be riskier. Absent extenuating circumstances, two bonds with the same rating, yield, and marketability are pretty much interchangeable. The stocks of, say, two steel companies or two computer companies may be very different propositions indeed.

Juggling deductions may be easier than juggling income. It's a simple matter to decide when to buy a computer or make many other deductible expenditures. You may be able to pay bills early or delay payments until January. If you're over the medical exclusion (5% of adjusted gross income), you may decide to go ahead with an elective procedure or dental work. And so on. The T-tax feature of *The Tax Advantage* will give you your marginal tax rate, so you can calculate the effect of a deduction.

Generally, you will want to take deductions as soon as possible, because time is money and because you're likely to be in a higher tax bracket next year if your income is increasing. There are exceptions, however. If your deductions are hovering around the zero-bracket amount (standard deduction), for example, you may want to bunch your deductions in the next year and take the standard deduction this year. (The zero-bracket amount is \$3,400 for married taxpayers filing jointly, \$1,700 for married taxpayers filing separately, and \$2,300 for singles.) And any time you would profit from accelerating income, you probably would profit from deferring deductions.

The end of the year is not the best time to invest in tax shelters. The soundest shelters are usually offered early in the year. During the year-end tax shuffle, all sorts of fly-by-night operators and dubious deals come out of the woodwork.

If tax planning is a significant priority, it should be a year-long enterprise, undertaken with foresight and forethought. If you wait until December, you will have lost the opportunity to keep adequate records of legitimate deductions; the opportunity for sound, legitimate, and secure tax strategies may be greatly diminished.

Getting Help

If you've ventured this deeply into tax strategy, you may have sought professional advice already. If you haven't, you may want to consider it. *The Tax Advantage* and *The Home Accountant* will help you get the numbers right, but they will not help you distinguish between legitimate deductions and those the IRS will not allow. Unless you enter the data properly, your computer can't tell the difference between an oil depletion allowance and a bag of groceries. About half of all taxpayers hire someone to fill out their returns. Probably another 25% obtain free assistance. There are several types of assistance readily available.

If you're only mildly uncertain about a deduction or some other question, and not too much rides on being right, the IRS offers free advice at its local offices. You'll find the one nearest you listed under U.S. Government in the

telephone book. The catch is that the IRS is not obliged to stand by its own advice, and you don't have much way of assessing the expertise of the person giving it. There is also the possibility that the IRS may not interpret the law as sympathetically as a professional tax adviser who's clearly on your side. A good adviser will be well informed of IRS procedures. You won't be risking an audit unwittingly.

The help for hire comes at several levels of expertise and, of course, expense.

Commercial preparers range from difficult-to-assess storefront outfits to such national companies as H&R Block and Tax Corporation of America. H&R Block alone prepares something like 10 million returns every year. The national firms generally employ well-trained staffs, and they'll be there if you get audited. (They may appear before the IRS to explain how your return was prepared, but they may not represent you, as an accountant or lawyer would.) On the other hand, their standard price may include only Form 1040, itemized deductions and dividend and interest income. With *The Tax Advantage* and *The Home Accountant*, you may not need professional assistance if those are the only forms you will file. Make sure what services you'll receive at what price. You should also go early. These companies make their money on volume, and you might not get as much attention in the April 15 crunch as you would earlier. The storefront commercial preparers run the gamut, and many disappear at the end of the tax season, leaving you unassisted in case of trouble. Check qualifications carefully and beware grandiose claims. No one, for example, can promise you a refund without figuring your taxes first.

Public accountants (as opposed to *certified* public accountants) are not licensed in most states. Their training and experience may vary widely. They may not represent you before the IRS.

Certified public accountants have passed a professional licensing exam. They are qualified to assist you, not only with your tax return, but also with year-round tax planning. CPAs are expensive, but they may be worth the price if your financial situation is complex. (Tax assistance is deductible.) They may represent you before the IRS.

Enrolled agents are probably the least known of the professional tax preparers. There are only about 20,000 in the country, and until a few years ago they were not allowed to advertise. Enrolled agents have either worked as IRS auditors for at least five years or passed an IRS exam. They may or may not be accountants. They may represent you before the IRS during audits or appeals.

Whether to seek professional assistance is a personal decision. There's probably little point, if your return is fairly simple and your deductions are straightforward. In more complex cases, involving upper incomes, an accountant may save you more than his fee. And, if you're involved in tax shelters or other technical tax strategies, professional advice may be essential to assure compliance with the byzantine tax laws and regulations.

Surviving an Audit

So, you've labored over your tax returns, taken your best shot at figuring the answers and done your best to do it right. As you send your labor into the maw of the IRS, with its 25,000 employees, you're probably thinking Will Rogers was right: you're not sure whether you're a martyr or a crook.

Maybe you envision rows of gray men in green eyeshades and wire-rimmed glasses, with garters on their sleeves and neat rows of carefully sharpened pencils at their elbows, poised to strike like rattlesnakes when they spot your boner. Nothing could be further from the truth. Martha Ebersole worked as an "intermittent" for the IRS in Austin. ("Intermittents" is the IRS's term for the temporary workers who sort the returns that come in by the Mack truck load, by the Boeing 707 load, after April 15.) She told this tale in *Texas Monthly*:

"The most significant trait among the group as a whole was obesity—I had never seen so many outstandingly large people. It was distressing to see women who gasped for breath as they walked. One of them was carrying an ice cooler for a lunch box...I talked to more gay men than I had ever seen in one place, except in a gay bar. One of them used to kneel down beside another and sing lilting ballads as he worked. As much as I enjoyed overhearing the songs, I was always relieved when the work leader appeared, restoring order to our row...."

It's the computers that get you.

But you've got one, too, right? Well, putting an Apple or even an IBM XT up against the IRS mainframes is about as fair as the law is when you go up against the IRS. (When else does the burden of proof lie with the accused?) Your computer won't impress the auditor. But *The Home Accountant* and *The Tax Advantage* will help you survive an audit, because using the programs effectively will help you organize your records and tax planning. If the agent wants to know about that business lunch on August 22, the memo you made on *The Home Accountant* will direct you to the right receipt, which you have stowed away in your accordian file.

What sort of thing aggravates the IRS computer? Getting chosen for an audit is often merely random, but the chances of getting audited increase dramatically with income. Reports vary slightly as to the precise percentages, but overall the IRS audits about one tax return in sixty, or 1.5% to 1.7% of the 95 million individual returns filed each year. If your income falls between \$25,000 and \$50,000, the odds rise to about one in thirty. Above \$50,000, the odds double again and continue to rise as your income increases. Such are the burdens of wealth.

Not much you can do about that, or would want to. Making less money is not an appealing way to cut your taxes or to dodge an audit. But your computer can help you avoid another problem that will attract the IRS's attention. Mathematical errors are the most frequent reason the IRS computer hiccups when it gets to a return. After the intermittents sort the returns,

computer operators punch each one into the computer. If the computer discovers mathematical errors in your return, the IRS usually will merely send you a refund or a bill for additional tax. But mathematical errors will remove your return from the computer and place it in the hands of a human, who may or may not be having a good day.

Computers can't think, of course. If you punch in \$2537 instead of \$25.37 for a (deductible, unreimbursed) three-martini lunch (still suffering the effects), *The Home Accountant* will dutifully add the sum to the total. Garbage in, garbage out and all that. But computers don't make mathematical errors. They also do not make mistakes copying numbers from one line to another or computing taxes. If you prepare your return on *The Tax Advantage*, the IRS computer will not regurgitate it, because you did the addition wrong. And, if you have given *The Home Accountant* the correct amounts for 157 three-martini lunches, you'll have the right answer on April 14 without having to add up all those numbers yourself. You'll also have done your recordkeeping systematically, so that when tax-time comes, you won't have lost half of the receipts. If you do get audited, you won't get snagged for flunking third-grade math or for misplaced documentation.

It's more difficult to avoid the second sort of deviation that attracts the IRS computer's attention. The IRS keeps elaborate statistical taxpayer profiles. The IRS knows, for example, the typical range of mortgage interest claimed by people in each income category. If you report \$200,000 in income and \$20,000 in mortgage interest, the IRS computer will probably send it through. But, if you report \$30,000 in income and the same \$20,000 in interest payments, the computer is likely to cough your return up to the humans, who are apt to want to know how you could swing that. Casualty losses and unreimbursed expenses for travel and entertainment (like three-martini lunches) are said to be particularly audit-prone. Average deductions are shown in Figure 7-12. It's a closely kept secret how much you have to deviate to cause the computer to take notice.

Adjusted Gross Income	Total			Contri- Miscel-		
	Deductions	Medical	Taxes	Interest	butions	laneous
Under \$10,000	\$4,377	\$1,753	\$890	\$2,428	\$589	\$621
\$10,000-\$15,000	\$5,352	\$1,315	\$1,170	\$2,534	\$664	\$547
\$15,000-\$20,000	\$5,578	\$983	\$1,389	\$2,681	\$664	\$537
\$20,000-\$25,000	\$6,032	\$760	\$1,718	\$2,899	\$672	\$552
\$25,000-\$30,000	\$6,534	\$681	\$1,984	\$3,130	\$697	\$556
\$30,000-\$50,000	\$8,163	\$598	\$2,740	\$3,772	\$919	\$672
\$50,000-\$100,000	\$13,600	\$734	\$4,817	\$6,177	\$1,755	\$1,113
\$100,000-\$200,000	\$28,659	\$1,268	\$10,028	\$12,554	\$4,849	\$2,713
\$200,000-\$500,000	\$62,642	\$1,883	\$20,793	\$24,596	\$14,900	\$5,831
\$500,000-\$1,000,000	\$166,044	\$2,182	\$49,434	\$60,201	\$51,288	\$15,904
Over \$1,000,000	\$570,294	\$1,932	\$158,722	\$187,417	\$209,747	\$50,858

Figure 7-12: Average deductions by income range in 1981. These figures are calculated from IRS statistics, but they are not IRS calculations. Source: *Internal Revenue Service Statistics of Income—1981, Individual Income Tax Returns*.

Fear of getting audited shouldn't deter you from claiming legitimate deductions, but ironclad records are especially important if you claim unusual or very large deductions. The burden of proof is always on you. The IRS will probably contend that a challenged deduction is not justified, unless you can prove that it is. The courts will agree if you appeal. Again, *The Home Accountant* and *The Tax Advantage* cannot make judgments about whether deductions are justified. If your return is complicated, or if you have doubts about some of your deductions, you might want to seek professional tax advice.

Sheer carelessness can also result in an audit. Wrong Social Security numbers, missing W-2 forms, or other missing information is an invitation to an audit. Check your return carefully before mailing.

If, despite your best efforts to avoid attracting attention, you do get audited, it's usually not as bad as all that. The auditor will ask questions to determine whether your deductions are allowable under the tax law and whether the amounts are computed correctly. An audit can be time-consuming and tedious, but carefully kept, well-organized records will expedite the process. Answer questions honestly and succinctly. Do not offer information or records the auditor does not request. You may pique his interest in something he wasn't going to bring up.

The worst that is likely to happen is that you will have to pay additional tax, plus interest. (The IRS demands more money in about two-thirds of the cases it audits.) The auditor may even discover an error in your favor. Unless you have committed deliberate fraud, criminal prosecution is not remotely likely.

There are five types of IRS audits:

- **Correspondence audits.** If the IRS is seeking backup information on only one or two items, it may ask you to supply them by mail. You may need only to send copies of a cancelled check or receipt. Always send copies, never originals. If the IRS is satisfied with your response, you will receive confirmation by mail. If not, you will receive a letter stating that you owe additional money.
- **Office audits.** Most audits are conducted at the IRS offices. If you are selected for an office audit, you will receive a letter requiring you to set up an appointment. The letter will state which portions of your return the IRS is questioning. The audit may cover a single portion of your return, or it may be far-ranging. You should review your records and receipts for the areas in question in advance and take them with you to the audit.
- **Field audits.** In the case of businesses or individuals with extremely complex terms, the IRS may conduct an audit at your home, place of business, or your accountant's office. A field audit may cover almost any aspect of your finances relevant to your tax return. The auditor might, for example, demand your bank statements and check your deposits against reported income.

- **Special audits.** If your auditor identifies himself as a special IRS agent, you may be the subject of a criminal investigation. You should obtain legal assistance before proceeding.
- **Taxpayer Compliance Measurement Program.** The IRS randomly selects a tiny fraction of returns for TCMP audits that are the basis for its taxpayer profiles, the statistical models that allow the agency's computers to spot suspect returns. These are exhaustive reviews. If you are chosen for a TCMP, the IRS will challenge *every* item on your return. Have children? Where are the birth certificates? Married? License, please. And so on. There's nothing you can do to avoid being chosen for a TCMP audit. Selection is based on the last digits of Social Security numbers. A few have challenged their selection for a TCMP audit. None has succeeded.

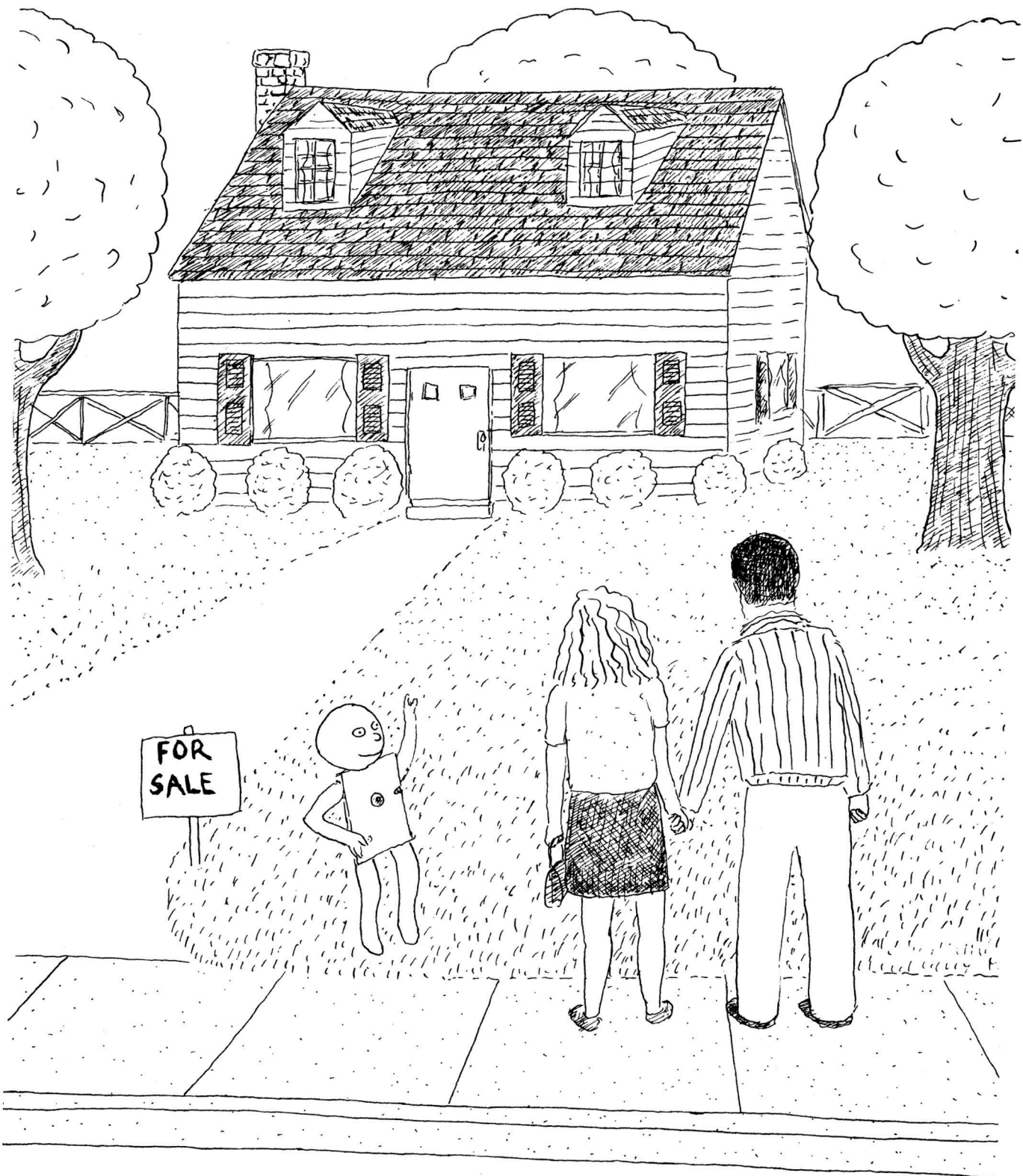
If you cannot reach an agreement with the auditor during an audit at an IRS office, you may ask for an immediate meeting with a supervisor. However, you need not decide on the spot whether to challenge the auditor. You may leave the matter unresolved and await the audit report in the mail. It will be accompanied by literature describing your alternatives. If you're still dissatisfied, you can ask the IRS to schedule an appeals conference. The IRS says most disputes are settled by this point. If you fail to convince the IRS at the appeals conference, you can appeal to the courts, but such appeals are futile about 90% of the time.

If you've kept good records on *The Home Accountant*, backed up with receipts and cancelled checks, an audit is likely to be a difficult but not harrowing experience. The odds are against getting audited, even for upper-income taxpayers. But the threat of an audit is a strong incentive to take recordkeeping seriously and to prepare tax returns carefully. And the more carefully you prepare for April 15 throughout the year, the better your chances of taking full advantage of available tax breaks without becoming either a martyr or a crook.

Rules of Thumb and General Advice

1. Year-round record keeping will help you maximize deductions and improve your chances of surviving an audit.
2. Expenses that are included in adjustments to income, such as self-employment expenses, may be more valuable than itemized deductions on Schedule A. Adjustments to income may increase your medical deduction, and you can take advantage of business expenses on Schedule C and still claim the standard deduction on Form 1040.
3. You must pay estimated tax on any significant amount of income from which taxes are not withheld. You will be subject to a penalty if you do not pay at least 80% of your taxes on your estimated tax returns. However, you will not be penalized as long as you pay at least as much tax as the previous year.

4. Income averaging may reduce your taxes if you have a large spurt in income. To qualify, your taxable income must be at least 140% of the average for the last four years.
5. If you are overzealous in pursuing tax shelters, long-term capital gains, and other tax preference items, you may be subject to the Alternative Minimum Tax. If your adjusted gross income is above \$40,000 and your tax preference items approach your taxable income, you should check to make sure.
6. The chances of getting audited increase dramatically as income rises. The IRS also selects returns for audits at random.
7. Unusually large deductions and mathematical errors spur IRS audits. *The Home Accountant* and *The Tax Advantage* won't help with the former, but they reduce the risk of careless errors.
8. When in doubt seek professional advice. The IRS offers free tax help, but it is not bound by its own advice and may be less disposed than a professional to interpretations that will reduce taxes.



8 TAX STRATEGIES TO MEET LONG-TERM FINANCIAL GOALS

Dodging the taxman is not an end in itself, but a means to help you meet your financial objectives. Improving your record-keeping to reduce taxes is hardly a tax strategy at all. It is simply a matter of taking advantage of what's already available. Deductions save money (which presumably is an objective for nearly everyone) without affecting your lifestyle or interfering with your long-term goals. On the other hand, deductions do not address specific long-term goals. Chances are, the savings will go for groceries.

Loopholes, remember, are Congress's way of helping along various worthy causes. Mostly, the lawmakers seem to have been going along with Calvin Coolidge, who was of the opinion that the business of America is business. Tax-sheltered investments, the good ones, give ordinary investors access to excellent business write-offs. The trick is to find the good ones, which is not easy. Tax shelters should be judged on their real promise as investments, not just their tax breaks.

Even if accelerated-depreciation oil and gas deals and real estate partnerships are beyond your financial (or psychological) horizons, Uncle Sam has some deals for you. Via the Internal Revenue Code, the government will subsidize your mortgage, which is the largest investment most people make. You can take a \$125,000 capital gain on your house, tax-free, after you're fifty-five. Investment in rental property also offers some of the tax advantages of tax shelters. A duplex is a safer investment than an oil deal, even if it isn't as sexily alluring.

There are also tax breaks on savings for retirement. Individual Retirement Accounts are only the best known. There are also Keogh plans for self-employed people, employee salary reduction plans, and tax-sheltered annuities. IRAs and Keoghs, in particular, are just too good to pass up. True, the penalties are stiff if you withdraw your money before you reach 59½. But don't you plan to save for retirement, anyway? Or do you plan to count on Social Security—and could you live comfortably on Social Security benefits, even assuming the troubled system remains solvent through the unforeseeable future?

You can also realize substantial tax advantages on any money you want to set aside for the children's college education, by transferring income to them. They will pay taxes on investment income at a much lower rate than you would, if they pay taxes at all. The 1984 tax law puts a stop to interest-free loans, one of the more popular ways of transferring assets to children temporarily, but there are other ways to accomplish the same goal.

Tax Implications of Buying and Selling Your Home

In the 1970s, real estate was a terrific long-term investment as well as a tax shelter. Property was appreciating rapidly. You could make a down payment of 10% and finance the remainder at 8% or 9% interest. Because of this leverage, your equity would double in a year, if real estate values increased 10%. This is a critical point. Without leverage, investing in a house would have been little more than an inflation hedge, even for the decade ending in mid-1983. For that period, housing appreciated an average of 9.2% per year, barely nosing out average inflation of 8.5%. With leverage, tax-deductible interest, and long-term capital gains taxed at 40% of your marginal tax rate, it's hard to find a better investment than a house. Short of the discovery of a chemical waste dump under the basement, there was hardly any way to go wrong.

Real estate isn't that kind of game in the 1980s. Houses and other property are appreciating more moderately, and interest rates may be twice those of the valleys of the 1970s. In the 1970s, buying often came out cheaper than renting, even if you lived in the house for only two years. Now you may have to stay put for five, before appreciation offsets closing costs and other front-end fees. If you invest in income property, the rent probably will not cover your costs for the first several years.

In the 1970s, financial advisers often counseled that a house should be a family's first, and largest, long-term investment. In strictly economic terms, that advice is not so obviously sound as it once was, at least for those in moderate income tax brackets. Because of high closing costs and slower appreciation, buying a house often makes sense in strictly economic terms only if you plan to live in it for a number of years.

Buying a home still makes sense. So may a real estate investment, if you choose your property carefully.

There are, of course, many intangible advantages to buying a house rather than renting. You may have a wider selection of housing, greater choice of location, and perhaps more space. You can adapt the house to suit yourself, and many improvements—remodeling the kitchen, say—may pay for themselves when you sell the house. However, there is no landlord to call when the roof leaks. You have to include home repairs in your budget.

You still have the advantage of leverage, but it will be offset by high interest rates. If you're buying for the first time, your new deduction for interest will absorb some of the interest. However, if you do not already itemize deductions because those available do not add up to the zero-bracket amount (\$3,400 for couples, \$2,300 for singles), the tax break may not be as large as you expect. Some of the interest you pay will be required to raise your deductions to the standard deduction. You will realize a tax savings only on the remainder.

In addition, closing costs on your new house usually will consume 3% or 4% of the purchase price. Your bank or savings and loan is also likely to

charge a loan initiation fee of 1 or 2 percentage points on your mortgage.

What if you already own a house but are planning to move to another city or trade up? If you sell your house through an agent, any appreciation will be reduced by his fee, typically 6%. That's a hefty \$6,000 on a \$100,000 house. (If you're buying for the first time, you'll still have to take into account the real estate agent's fee you'll pay when you eventually sell.) In all, the out-of-pocket expenses of trading one \$100,000 house for another may come to nearly \$10,000. Your new house will have to appreciate by that amount before you begin earning a return on your investment.

On the other hand, you will be able to defer capital gains tax on the profit on your first house, if you buy another within twenty-four months. If you sell and rent, you'll have to pay that tax. If you rent, you will also lose your deduction for interest payments.

By now, you are beginning to see that the calculus of this equation is rather elaborate, so sharpen your pencils. Better yet, boot up *The Tax Advantage*. (If you do not have *The Tax Advantage*, get out last year's tax return and follow along, using the tax tables in Figure 7-2.)

The Lassiters, you may recall, paid \$70,000 for their house about four years ago; they figure it's now worth \$102,000. They spent \$6,000 remodeling an attic as a study for Susan. The rest of the difference is appreciation—their potential profit on the house. (This means that their original \$76,000 investment has been appreciating at about 7% per year, which may be a little optimistic.) The value of the house has increased by a third in four years, not bad for these parlous times.

Let's look at the tax benefits the Lassiters derive from owning the house. Their actual federal tax bill, living in the house, came to \$9,870. Entering Schedule A on *The Tax Advantage*, they find that their interest deduction was \$6,936. Using the tax planning feature (ControlX), they eliminate that deduction and return to Form 1040. Pressing T (Tax), they find their tax bill is now \$12,582, an increase of \$2,712, and that their tax bracket is now 40%. They will also lose their real estate tax deduction of \$734. Repeating the procedure, they find that their tax bill is now \$12,876, an increase of another \$294. Owning the house reduced their tax bill by a total of \$3,006.

(If you're considering buying a house, reverse the procedure. If you're buying your first home, add the full deductions. If you're trading up, you'll be figuring the tax effects of the difference between what you're paying now and the costs of your new home.)

The Lassiters' tax savings come to about \$250 a month (\$3,006/12). Since their mortgage payments are \$700, the out-of-pocket cost of owning the home (not counting maintenance and repairs) is \$450 a month. This looks terrific. For that amount of rent, they might get a 1,000-squarefoot apartment with noisy neighbors. But they must also figure out whether they're earning a decent rate of return on their equity in their house, since they would have a hefty sum to invest if they sold.

The Lassiters have invested \$26,000 in the house (plus a few hundred dollars in principal they have repaid on the mortgage). This includes the down payment and \$6,000 for the attic room. If they sold the house after four years for \$102,000, less \$6,120 for the real estate agent's fee, they would receive \$95,880 in cash. They would use about \$49,500 of that to pay off the loan, leaving a profit of \$46,380. Going to the handy compound interest table in Chapter 5, they find that this is a compound return of better than 15%. And their profit would be taxed at favorable long-term capital gains rates, even if they did not buy another house. Whether their equity will continue to earn that rate of return depends on the real estate market. You'll have to make your own guess about how houses will appreciate in the future. This writer certainly wouldn't want to make any predictions.

The Lassiters, it appears, would be well advised to leave well enough alone. It's costing them \$450 a month to live in the house, and their equity is earning 15% a year.

But suppose they had moved in 1983, because of a job change or because they simply wanted to? (In later years, the tax rates would be slightly lower, but otherwise the procedure would be identical.) For tax purposes, it would have made a great deal of difference when the house was sold. If they had sold it on January 1, they would have lost all of their mortgage interest and real estate tax deductions. Had they sold it on December 31, the deductions would be the same. In either case, they would have had to pay capital gains tax, if they did not intend to buy another house of equal or higher value within twenty-four months. (If they were selling at the end of the year and planned to rent, surely they would have delayed closing until January 1, 1984, to defer the capital gains tax for a year.)

To figure what their capital gains tax would be, the Lassiters fill out IRS Form 2119, Sale or Exchange of Principal Residence (not included in *The Tax Advantage*). Figure 8-1 shows how the form would look if they sold the house for \$102,000, less \$6,120 for the agent's fee. They enter their taxable capital gain of \$19,880 on line 10 of Schedule D on *The Tax Advantage* (Figure 8-2), and the program does the rest. Their taxable capital gain (Line 23) is \$7,952 (40% of the total gain); this would be taxed as if it were ordinary income.

If the Lassiters had sold their house on January 1, 1983, their total tax bill would come to \$16,601 (Figure 8-3), or \$6,191 more than they actually paid. The tax on the capital gain alone, not counting the loss of the mortgage interest and property tax deductions, would be \$3,185. Thus, the tax cost of selling the house would be \$3,185, plus \$250 a month in perpetuity for the loss of deductions.

After subtracting the capital gains tax, the Lassiters would be left with about \$42,000 in cash available for investment. If they earned an after-tax return of 10% (in tax-exempt bonds, perhaps) that would yield \$4,200 a year, or \$350 a month. They would, of course, have to subtract the lost deductions from that, leaving a net cash flow proceeding from the sale of only \$100 a month. Not a

Form 2119 Department of the Treasury Internal Revenue Service (U.S.)	Sale or Exchange of Principal Residence ▶ See instructions on back. ▶ Attach to Form 1040 for year of sale (see instruction C).	OMB No. 1545-0072 <div style="font-size: 2em; font-weight: bold;">1983</div> <div style="font-size: 1.5em; font-weight: bold;">22</div>
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Do not include expenses that you deduct as moving expenses.

Name(s) as shown on Form 1040: _____ Your social security number: _____

1 (a) Date former residence sold ▶ _____

(b) Enter the face amount of any mortgage, note (for example, second trust), or other financial instrument on which you will receive periodic payments of principal or interest from this sale ▶ _____

2 (a) If you bought or built a new residence, enter date you occupied it; otherwise enter "none". _____

(b) Are any rooms in either residence rented out or used for business for which a deduction is allowed? ☐ Yes ☐ No
 (If "Yes" do not include gain in line 7 from the rented or business part; instead include in income on Form 4797.)

PART I.—Gain and Adjusted Sales Price

3 Selling price of residence. (Do not include selling price of personal property items.)	3	102,000
4 Commissions and other expenses of sale not deducted as moving expenses	4	6,120
5 Amount realized (subtract line 4 from line 3)	5	95,880
6 Basis of residence sold	6	76,000
7 Gain on sale (subtract line 6 from line 5). (If line 6 is more than line 5, enter zero and do not complete the rest of form.) If you bought another principal residence during the replacement period or if you elect the one time exclusion in Part III, continue with this form. Otherwise, enter the gain on Schedule D, line 2 or 10.*	7	19,880
If you haven't replaced your residence, do you plan to do so within the replacement period? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If "Yes" see instruction C.)		
8 Fixing-up expenses (see instructions for time limits.)	8	
9 Adjusted sales price (subtract line 8 from line 5)	9	95,880

PART II.—Gain to be Postponed and Adjusted Basis of New Residence

Do not complete this part if you check Yes to 14(d) to elect the Age 55 or over Exclusion in Part III.

10 Cost of new residence	10	
11 Gain taxable this year. (If line 9 is more than line 10, subtract line 10 from line 9. Do not enter more than line 7. Enter the gain from line 11 on Schedule D, line 2 or 10. *) (If line 10 is more than line 9, enter zero.)	11	
12 Gain to be postponed (subtract line 11 from line 7)	12	
13 Adjusted basis of new residence (subtract line 12 from line 10)	13	

PART III.—55 or over Exclusion, Gain to be Reported, and Adjusted Basis of New Residence Yes No

14 (a) Were you 55 or over on date of sale? ☐ Yes ☐ No

(b) Was your spouse 55 or over on date of sale?
 (If you answered "No" to 14(a) and (b), do not complete this part.) ☐ Yes ☐ No

(c) Did the one who answered "Yes" to 14(a) or (b) own and use the property sold as his or her principal residence for a total of at least 3 years (except for short absences) of the 5-year period before the sale?
 (If "No," see Part II.) ☐ Yes ☐ No

(d) If you answered "Yes" to 14(c), do you elect to take the once in a lifetime exclusion of the gain on the sale?
 (If "Yes," complete the rest of Part III. If "No," see Part II.) ☐ Yes ☐ No

(e) At time of sale, was the residence owned by: ☐ you, ☐ your spouse, ☐ both of you? ☐ Yes ☐ No

(f) Social security number of spouse, at time of sale, if different from number on Form 1040 ▶ _____
 (Enter "none" if you were not married at time of sale.)

15 Enter the smaller of line 7 or \$125,000 (\$62,500, if married filing separate return)	15	
16 Part of gain included (subtract line 15 from line 7) (If the result is zero, do not complete the rest of form.)	16	
17 Cost of new residence. If you did not buy a new principal residence, enter "None." Then enter the gain from line 16 on Schedule D, line 10,* and do not complete the rest of form	17	
18 Gain taxable this year. (If line 9 is more than line 15 plus line 17, subtract line 15 plus line 17 from line 9. Do not enter more than line 16. Enter the gain from line 18 on Schedule D, line 10. *) (If line 15 plus line 17 is more than line 9, enter zero.)	18	
19 Gain to be postponed (subtract line 18 from line 16)	19	
20 Adjusted basis of new residence (subtract line 19 from line 17)	20	

***Caution:** If you completed Form 6252 for the residence in 1(a), do not enter your taxable gain from Form 2119 on Schedule D.

For Paperwork Reduction Act Notice, see back of form. Form **2119** (1983)

Figure 8-1: If the Lassiters sold their house for \$102,000, their capital gain would be \$19,880. Their basis in the house is \$76,000—the \$70,000 purchase price plus \$6,000 for remodeling an attic room. The real estate agent's fee of 6% is deducted from the sale price.

good deal, especially considering their investment in the house has been earning them 15% (though not in cash).

Your calculation might turn out entirely different, however. If you're planning to buy for the first time and have only a few other deductions, for example, the zero-bracket amount, or standard deduction, would consume a large portion of your potential tax savings. Or housing prices in your area

SUSAN AND THOMAS L. LASSITER

*** SCHEDULE D - CAPITAL GAINS AND LOSSES ***

THOMAS L. LASSITER
SUSAN L. LASSITER

SSN:444-55-6666
SSN:555-99-1234

> I-SHORT TERM <

1	SHORT-TERM ASSETS	1	
1F	LOSS.	1F	0
1G	GAIN.	1G	0
2	SALE OF RESIDENCE	2	0
3	INSTALLMENT SALES	3	0
4F	LOSS FROM PARTN.	4F	0
4G	GAIN FROM PARTN.	4G	0
5F	TOTAL LOSS.	5F	0
5G	TOTAL GAIN.	5G	0
6	COMBINE LINE 5.	6	0
7	CARRYOVER AFTER '69	7	0
8	NET GAIN OR LOSS.	8	0

> II-LONG TERM <

9	LONG-TERM ASSETS.	9	
9F	LOSS.	9F	0
9G	GAIN.	9G	0
10	SALE OF RESIDENCE	10	19,880
11	INSTALLMENT SALES	11	0
12F	LOSS FROM PARTN.	12F	0
12G	GAIN FROM PARTN.	12G	0
13F	TOTAL LOSS.	13F	0
13G	TOTAL GAIN.	13G	19,880
14	COMBINE LINE 13.	14	19,880
15	CAPITAL GAIN DISTR.	15	0
16	FORM 4797	16	0
17	COMBINE	17	19,880
18	CARRYOVER AFTER '69	18	0
19	NET GAIN OR LOSS.	19	19,880

> III-SUMMARY <

20	COMBINE 8 & 19.	20	19,880
21	COMPUTED.	21	19,880
22	60% OF LINE 20.	22	11,928
23	CAPITAL GAIN.	23	7,952
24	COMPUTED.	24	0
25	CAPITAL LOSS.	25	0

> V-POST '69 CARRYOVER <

> SHORT-TERM <

26	LOSS ON LINE 8.	26	0
27	GAIN ON LINE 19.	27	0
28	COMBINE 26 AND 27	28	0
29	SMALLER OF 25 & 28.	29	0
30	CARRYOVER	30	0

*** SCHEDULE D - CAPITAL GAINS AND LOSSES ***

THOMAS L. LASSITER
SUSAN L. LASSITER

SSN:444-55-6666
SSN:555-99-1234

> LONG-TERM <

31	SUBTR. 29 FROM 25	31	0
32	LOSS FROM 19.	32	0
33	GAIN FROM 8	33	0
34	COMBINE 32 AND 33	34	0
35	LINE 31 TIMES 2	35	0
36	CARRYOVER	36	0

Figure 8-2: *The Tax Advantage* automatically calculates the taxable gain on the Lassiter's sale of their house. Their total gain was \$19,880. The program computes a taxable gain of \$7,952. You could figure this out almost as easily on a calculator, but the computer reduces the chance of error.

might be virtually stable, or even declining, eliminating the return on your investment in your house. Some adjustable rate mortgages can actually consume equity; if interest rises above a certain level, it is added to your principal rather than being charged in monthly payments. It's difficult to make generalizations about the 1980s housing market.

SUSAN AND THOMAS L. LASSITER

*** FORM 1040 U.S. INDIVIDUAL INCOME TAX RETURN 1983 ***

THOMAS L. LASSITER
SUSAN L. LASSITER

SSN:444-55-6666
SSN:555-99-1234

505 LAKESHORE DR.
HAGERSTOWN, MD 55555

YOUR OCCUPATION : PRINCIPAL
SPOUSE'S OCCUPATION : EDITOR

> FILING STATUS <

1. ☐ SINGLE
2. ☒ MARRIED FILING JOINT RETURN
3. ☐ MARRIED FILING SEPARATE RETURN
4. ☐ HEAD OF HOUSEHOLD
5. ☐ QUALIFYING WIDOW(ER)

> EXEMPTIONS <

- 6A ☒-YOURSELF ☐-65 OR OVER ☐-BLIND NUMBER CHECKED
6B ☒-SPOUSE ☐-65 OR OVER ☐-BLIND ON 6A AND B. . [2]
6C NUMBER OF YOUR DEPENDENT CHILDREN WHO LIVED WITH YOU [0]
6D NUMBER OF OTHER DEPENDENTS [0]
6E TOTAL NUMBER OF EXEMPTIONS CLAIMED [2]

> INCOME <

7	WAGES	7	60,800	I
8	INTEREST INCOME [B]	8	996	I
9A	DIVIDENDS [B]	9A	642	I
9B	EXCLUSION	9B	0	
9C	SUBTRACT	9C	642	
10	TAX REFUNDS	10	482	I
11	ALIMONY RECEIVED	11	0	
12	BUSINESS [C]	12	-1,541	I
13	CAPITAL GAIN [D]	13	7,952	I
14	40% CAP. GAIN DISTR.	14	0	
15	SUPPLEMENTAL GAINS	15	0	
16	FULLY TAXABLE PENS.	16	0	
17A	OTHER PENSIONS	17A	0	
17B	TAXABLE AMOUNT	17B	0	
18	SUPPLEMENT. INCOME [E]	18	0	
19	FARM INCOME	19	0	
20A	UNEMPLOYMENT COMPEN.	20A	0	
20B	TAXABLE AMOUNT	20B	0	
21	OTHER INCOME	21	0	
22	TOTAL INCOME	22	69,331	

> ADJUST. TO INCOME <

23	MOVING EXPENSE	23	0	
24	EMPL. BUS. EXP.	24	0	
25A	IRA	25A	4,000	
25B	PAYMENTS IN 1984	25B	4,000	
26	KEOGH	26	0	
27	INTEREST PENALTY	27	0	
28	ALIMONY PAID	28	0	
29	MARRIED COUPLE [W]	29	2,516	I
30	DISABILITY EXCLUS.	30	0	
31	TOTAL ADJUSTMENTS	31	6,516	

SUSAN AND THOMAS L. LASSITER

*** FORM 1040 U.S. INDIVIDUAL INCOME TAX RETURN 1983 ***

THOMAS L. LASSITER
SUSAN L. LASSITER

SSN:444-55-6666
SSN:555-99-1234

> ADJUST. GROSS INCOME <

32 ADJUSTED GROSS. 32 62,815

> TAX COMPUTATION <

33	FROM LINE 32.	33	62,815
34A	DEDUCTIONS [A].	34A	708 X
34B	ALLOW. CHAR. CONTR.	34B	0
35	SUBTRACT.	35	62,107
36	EXEMPTIONS * \$1000.	36	2,000
37	TAXABLE INCOME.	37	60,107
	INCOME AVERAGE [G].		
38	TAX.	38	16,061 R
39	ADDITIONAL TAXES.	39	0
40	TOTAL.	40	16,061

> CREDITS <

41	ELDERLY.	41	0
42	FOREIGN TAX.	42	0
43	INVESTMENT.	43	0
44	POLITICAL CONTRIB.. . . .	44	0
45	DEPENDENT CARE.	45	0
46	JOBS CREDIT.	46	0
47	RESIDENTIAL ENERGY.	47	0
48	TOTAL CREDITS.	48	0
49	BALANCE.	49	16,061

> OTHER TAXES <

50	SELF EMPLOYMENT [SE].	50	0
51	ALT. MINIMUM TAX.	51	0
52	RECAP. INVEST. CREDIT.	52	0
53	SOC. SEC. TAX ON TIP.	53	0
54	UNCOLL. TAXES ON TIP.	54	0
55	IRA.	55	0
56	TOTAL TAX.	56	16,061

> PAYMENTS <

57	FED. TAX WITHHELD.	57	10,549
58	ESTIMATED TAX PAYM.	58	0
59	EARNED INCOME CREDIT.	59	0
60	FORM 4868.	60	0
61	EXCESS FICA & RRTA.	61	0
62	CRDT. FOR TAX ON FUEL.	62	0
63	REG. INVEST. CO..	63	0
64	TOTAL.	64	10,549
65	* OVERPAID *.	65	0
66	REFUNDED TO YOU.	66	0
67	APPLIED TO 1984.	67	0
68	* AMOUNT YOU OWE *.	68	5,512

Figure 8-3: The Lassiter's tax bill for 1983 would have been \$16,061, if they had sold their house on January 1—or \$6,191 more than they actually paid.

Had the Lassiters sold their house, they might have had to spend some of their paltry increase in cash flow to consult an accountant. They would have had to pay the estimated tax, either quarterly or in a lump sum on April 15. Income averaging might have helped, if their average taxable income for the previous four years had been less than \$50,000. (That's as of 1983. The 1984 tax law would reduce the figure to \$43,000.)

The Lassiters clearly have strong tax incentives to remain homeowners. Until you're fifty-five, the government thinks you ought to own a house, and, if you have a taxable capital gain from selling the one you have, the taxman stands ready to pay you a substantial sum to buy another (\$3,185, plus at least \$250 a month in the Lassiters' case). The taxes actually are deferred, and the amount on which you potentially owe taxes increases every time you move. After you turn fifty-five, the government is willing to forgive and forget, and let you retire in peace. You will be forgiven taxes on accumulated capital gains of up to \$125,000. Here's the way the deferral of capital gains on your principal residence works.

The Lassiters' "basis" in their current house is \$76,000, the purchase price plus improvements (the attic room). The basis is contingent on expenditures; the financing arrangements are irrelevant. Let's suppose they eventually sell it for \$102,000 and buy another house for \$125,000. Inflation is rekindled, and they sell that house for \$250,000. (This is not so far-fetched. If a house appreciates at 10% per year, it will double in value in seven years.) They buy a third house for \$275,000, and, when they retire, they sell it for \$325,000 and move into a \$150,000 condominium (which is going to be a modest one at these rates of inflation). Now let's figure out how their capital gains tax comes out, under current law, for each sale.

We've already made the calculation for the first house:

Sale price		\$102,000
Less commission		6,120
Net	95,880	
Less basis		76,000
Gain	\$19,880	

When they buy their second house, they will defer tax on the profit on the first, since the second house is more expensive. (What matters is the price. It doesn't matter how much they borrow.) However, the deferred gain will be deducted from the basis of the second house. It comes out like this:

Price of second house		\$125,000
Less deferred gain		19,880
Basis	\$105,120	

The sale of the second house:

Sale price		\$250,000
Less commission		15,000
Net	235,000	
Less basis		105,120
Gain	\$129,880	

The Lassiters' basis in their third house:

Price		\$275,000
Less deferred gain		129,880
Basis	\$145,120	

The sale:

Sale price	\$325,000
Less commission	19,500
Net	305,500
Less basis	145,120
Gain	\$160,380

By now, the Lassiters would be confronting a stiff tax bill if further deferments weren't available. Even after the 60% capital gains reduction, their gain comes to \$64,152. If their tax bracket had reached the 50% mark, the tax on the sale would be more than \$32,000. Ordinarily, the full amount would be due the year of the sale.

When they buy a residence less expensive than the one they sell, the difference in prices is the maximum gain taxable that year. This should trim their gain on their third house by a little less than \$5,000:

Net sale price of house	\$305,500
Price of condo	150,000
Maximum taxable gain	\$155,500

However, the Lassiters are now over fifty-five, so they qualify for the once-in-a-lifetime \$125,000 tax-free gain. The Lassiters would have to spend \$180,500 on a condo to defer taxes on all of their accumulated gain:

Net sale price of house	\$305,500
Less exclusion	125,000
Minimum price of new house to defer tax on all gains (even if gain had been larger than the Lassiters')	\$180,500

Since the Lassiters' condo is less expensive than that, the calculation works like this:

Accumulated gain	\$160,380
Less exclusion	125,000
Gain after exclusion	\$ 35,380
Net sale price of house	\$305,500
Cost of condo	150,000
Exclusion	125,000
Total	275,000
Maximum taxable gain	\$ 30,500
Gain after exclusion	\$ 35,380
Taxable gain	30,500
Deferred gain	\$ 4,880

Now, to figure the basis of the condo, we simply deduct the deferred gain from the purchase price:

Price of condo	\$150,000
Less deferred gain	4,880
Basis	\$145,120

Form 2119 Department of the Treasury Internal Revenue Service (O)	Sale or Exchange of Principal Residence ▶ See instructions on back. ▶ Attach to Form 1040 for year of sale (see instruction C).	OMB No. 1545-0072 <div style="font-size: 2em; font-weight: bold;">1983</div> 22
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Do not include expenses that you deduct as moving expenses.

Name(s) as shown on Form 1040. _____ Your social security number _____

1 (a) Date former residence sold ▶ _____

(b) Enter the face amount of any mortgage, note (for example, second trust), or other financial instrument on which you will receive periodic payments of principal or interest from this sale ▶ _____

2 (a) If you bought or built a new residence, enter date you occupied it; otherwise enter "none". _____

(b) Are any rooms in either residence rented out or used for business for which a deduction is allowed? ☐ Yes ☐ No
 (If "Yes" do not include gain in line 7 from the rented or business part; instead include in income on Form 4797.)

PART I.—Gain and Adjusted Sales Price

3 Selling price of residence. (Do not include selling price of personal property items.)	3	225,000
4 Commissions and other expenses of sale not deducted as moving expenses	4	19,500
5 Amount realized (subtract line 4 from line 3)	5	205,500
6 Basis of residence sold	6	145,200
7 Gain on sale (subtract line 6 from line 5). (If line 6 is more than line 5, enter zero and do not complete the rest of form.) If you bought another principal residence during the replacement period or if you elect the one time exclusion in Part III, continue with this form. Otherwise, enter the gain on Schedule D, line 2 or 10.*	7	160,380
If you haven't replaced your residence, do you plan to do so within the replacement period? <input type="checkbox"/> Yes <input type="checkbox"/> No (If "Yes" see instruction C.)		
8 Fixing-up expenses (see instructions for time limits.)	8	
9 Adjusted sales price (subtract line 8 from line 5)	9	205,500

PART II.—Gain to be Postponed and Adjusted Basis of New Residence

Do not complete this part if you check Yes to 14(d) to elect the Age 55 or over Exclusion in Part III.

10 Cost of new residence.	10	
11 Gain taxable this year. (If line 9 is more than line 10, subtract line 10 from line 9. Do not enter more than line 7. Enter the gain from line 11 on Schedule D, line 2 or 10.*) (If line 10 is more than line 9, enter zero.)	11	
12 Gain to be postponed (subtract line 11 from line 7)	12	
13 Adjusted basis of new residence (subtract line 12 from line 10)	13	

PART III.—55 or over Exclusion, Gain to be Reported, and Adjusted Basis of New Residence

		Yes	No
14 (a) Were you 55 or over on date of sale?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Was your spouse 55 or over on date of sale? (If you answered "No" to 14(a) and (b), do not complete this part.)		<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Did the one who answered "Yes" to 14(a) or (b) own and use the property sold as his or her principal residence for a total of at least 3 years (except for short absences) of the 5-year period before the sale? (If "No," see Part II.)		<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) If you answered "Yes" to 14(c), do you elect to take the once in a lifetime exclusion of the gain on the sale? (If "Yes," complete the rest of Part III. If "No," see Part II.)		<input checked="" type="checkbox"/>	<input type="checkbox"/>
(e) At time of sale, was the residence owned by: <input type="checkbox"/> you, <input type="checkbox"/> your spouse, <input checked="" type="checkbox"/> both of you?			
(f) Social security number of spouse, at time of sale, if different from number on Form 1040 ▶ (Enter "none" if you were not married at time of sale.)			

15 Enter the smaller of line 7 or \$125,000 (\$62,500, if married filing separate return)	15	125,000
16 Part of gain included (subtract line 15 from line 7) (If the result is zero, do not complete the rest of form.)	16	30,380
17 Cost of new residence. If you did not buy a new principal residence, enter "None." Then enter the gain from line 16 on Schedule D, line 10,* and do not complete the rest of form	17	150,000
18 Gain taxable this year. (If line 9 is more than line 15 plus line 17, subtract line 15 plus line 17 from line 9. Do not enter more than line 16. Enter the gain from line 18 on Schedule D, line 10.*) (If line 15 plus line 17 is more than line 9, enter zero.)	18	30,500
19 Gain to be postponed (subtract line 18 from line 16)	19	98,000
20 Adjusted basis of new residence (subtract line 19 from line 17)	20	145,200

*Caution: If you completed Form 6252 for the residence in 1(a), do not enter your taxable gain from Form 2119 on Schedule D.

For Paperwork Reduction Act Notice, see back of form.

Form 2119 (1983)

Figure 8-4: After you are fifty-five, you will be forgiven taxes on cumulative gains of up to \$125,000 on the sale of your house. In this example, the Lassiters have accumulated gains of \$160,380 but will pay taxes on only \$30,500. You may claim the \$125,000 exclusion only once.

Figure 8-4 shows how the Lassiters would have reported the transaction, if it had occurred in 1983. (Obviously, forms for the future are not available.) They would enter their taxable gain of \$30,500 on Schedule D of *The Tax Advantage*, and the program would calculate the tax. The 60% write-off for capital gains would reduce the figure to \$12,200. If their marginal tax rate

were 50%, the tax due on their accumulated gain of \$160,380 would be \$6,100. That's an effective rate of 3.8%. And, if they bought a more expensive condo, they wouldn't pay any tax at all.

The Lassiters would not be able to use the exclusion again. If they sold the condo and moved into an apartment, they would have to pay capital gains tax on the remaining \$4,880, plus any profit on the condo. If they kept the condo or bought a more expensive one, however, no further taxes would be paid on their house profits, unless their estate were large enough to incur estate taxes.

Calvin Trillin was right when he observed that the Internal Revenue Code is written on the theory that every man should have his castle. Along with IRAs and Keoghs, the tax laws governing houses are about the best tax deals most people are likely to find.

IRAs

IRAs are simply the best tax deal available to middle-income salary earners—in fact, one of the best investments around, in general.

Since 1982, anyone who earns money has been able to tuck away up to \$2,000 a year (but no more than they earned) in an IRA. A two-income couple may contribute up to \$4,000 in separate IRAs. A one-income family is allowed to establish a spousal IRA in addition to the income-earner's account. The maximum contribution is \$2,250 and may be distributed however the couple chooses, as long as no more than \$2,000 is contributed to either account. If you receive a lump sum from a tax-protected pension plan when you change jobs, you can "roll over" the entire amount into an IRA, provided you act within sixty days. Regular IRA contributions can be made up until your tax return is due, including extensions. (You may make a contribution for the 1984 tax year as late as April 15, 1985, or even June 15, if you file for an automatic extension on your tax return.)

Taxes are deferred on money you contribute to an IRA. That means the government is providing a hefty chunk of your retirement investment. Suppose you place \$2,000 in an IRA and your marginal tax rate is 50%. Without the IRA contribution, you would pay \$1,000 in federal income tax on that \$2,000, leaving \$1,000 to invest. In effect, the government is providing half of your IRA contribution, giving you an immediate 100% return on your investment. If your tax bracket is 42%, you contribute \$1,160, and your tax saving is \$840, for an instant return of 72%. If your bracket is 33%, you contribute \$1,340, the government pays \$660 and the return is 49%. And so on. It's hard to find a better deal. And the state where you pay income tax will sweeten the pot by another couple of hundred dollars. The amount depends on your state tax bracket.

The deal is better yet. The income from your investment isn't taxable, either. If you're in the 50% tax bracket, this means 10% interest is the equivalent to taxable interest of 20%. If your tax bracket is 33%, 10% interest is the equivalent of taxable interest of nearly 15%.

Andrew Tobias offers up terrific compound interest stories (*Playboy*, March 1983):

"It was Homer who said that \$1,000 invested at a mere eight percent for 400 years would amount to 23 quadrillion dollars—\$5,000,000 for every human on earth. (And you can't see any reason to save?) But, he said, the first 100 years are the hardest. (This was Sidney Homer, not Homer Homer—*A History of Interest Rates*. Outstanding.)"

Here's another:

"And then there was the king who held a chess tournament among the peasants—I may have this a little wrong, but the point holds—and asked the winner what he wanted as his prize. The peasant, in apparent humility, asked only that a single kernel of wheat be placed for him on the first square of his chessboard, two kernels on the second, four on the third—and so forth. The king fell for it and had to import grain from Argentina for the next 700 years. Eighteen and a half million trillion kernels, or enough, if each kernel is a quarter inch long (which it may not be; I've never seen wheat in its pre-English muffin form), to stretch to the sun and back 391,320 times.

"That was nothing more than one kernel's compounding at 100% per square for 64 squares."

Well, if you have to wait 400 years, your umpty-great-grandchildren's dotage is apt to precede the ripening of your retirement account. And the chessboard trick will work as well with money as with wheat—only, at 8% interest, it would take 576 years to double your money sixty-four times. Even at 12%, it would take 384 years. (Remember the Rule of 72: to determine the number of years it takes to double your money, divide the interest rate into 72: $72/8 = 9$, $9 \times 64 = 576$; $72/12 = 6$, $6 \times 64 = 384$. No, nobody knows why it works.)

Nevertheless, an IRA is one of the few places in the world where compound interest can work its magic unfettered by taxes. It might even make you a millionaire.

There's got to be a catch, right? Of course, at least two. First, the IRS will take you to the cleaners if you begin withdrawing money before you reach 59½. Any money you withdraw before that will be fully taxable at the marginal rate you're paying at the time. That might not be so bad. The tax might not be any more than you would have paid in the first place, and you retain tax protection for the remainder. But you must also pay a 10% tax on the pre-tax amount of the withdrawal. That's a fairly stiff penalty. You also will be penalized if you fail to begin withdrawing funds by the time you are 70½. The IRS will tax you on the amount it figures you ought to withdraw, based on actuarial tables.

The penalty is not quite as bad as it seems. Because your money will have been compounding tax-free, you still may come out ahead as long as you do not withdraw funds from the account for five to ten years, depending on your tax bracket and interest rates. Besides, you really should set aside money for retirement. An IRA will help you muster the discipline to save. An IRA is not

forever. You may withdraw funds without penalty if you become totally disabled. If you die, your beneficiary has the option of taking the money or rolling it over into his own IRA.

The second catch is that inflation will be compounding away along with your IRA. By the time you retire, the hundreds of thousands of dollars you accumulate will be worth only a fraction of the value of that amount in today's dollars. If inflation averages 7% for thirty years, \$1 million will be worth only \$131,372 in today's dollars. The planning feature of the IBM version of *The Home Accountant* will allow you to figure whatever inflation and interest rates you think may occur during your planning period.

Of course, if you could accurately predict interest rates and inflation, you could make a bundle in the stock market and hire yourself out as a high-priced consultant. So could any one else with that knack. But that would require clairvoyance beyond the grasp of the dismal science. As David Fehr, former professor of finance at Harvard Business School, once observed, "Economic forecasting houses like Data Resources and Chase Econometrics have successfully predicted fourteen of the last five recessions." They don't do much better with inflation and interest.

There is a solution. In general, the real return on reasonably safe investments has been 2% to 4%, after inflation. You'd probably do better assuming that pattern will continue than guessing at inflation and interest rates twenty years hence. Thus, you can project the future value of your IRA in today's dollars by assuming a real interest rate of 3% or 4%. The numbers will come out in the right ballpark, whether you're earning 14% interest during 10% or 11% inflation, or 3% or 4% with no inflation. The following chart compares the real value of an IRA, at 3% interest after inflation, with the its nominal value at various interest rates. You might reasonably expect annual deposits of \$2,000 for 30 years to yield something like \$100,000 in today's dollars. Future Value of \$2,000 a Year Invested at Varying Interest (Multiply by 2 for value of \$4,000 invested annually)

Years	7%	8%	9%	10%	11%	3% (Current Dollars)
10	\$ 29,567	\$ 31,291	\$ 33,121	\$ 35,062	\$ 37,123	\$ 26,616
20	87,730	98,846	111,529	126,005	142,530	55,353
30	202,146	244,692	297,150	361,887	441,826	99,005

When should you open an IRA? Today, if the banks are still open. Because of the compounding of interest over long periods, the \$2,000 invested today will generate a far larger return than later contributions, by the time you reach retirement. And, while you can wait until you file your tax return, there's little point in continuing to collect taxable interest when you could earn the same return in an IRA without paying taxes. It may even be worthwhile to borrow money to contribute to an IRA, but be sure to do your arithmetic carefully to make certain the move is profitable. True, an IRA contribution commits your funds for a long time. But is there really any difference between making that commitment now and doing it at the end of the year?

Legally, your IRA can include investments in nearly anything except collectibles. (Deductions for collectibles not only will be disallowed but also will incur a penalty.) Putting tax-exempt bonds or taxsheltered investments in an IRA, though legal, defies common sense for obvious reasons. With those exceptions, you may choose your investments and shift from one to another as you wish. It is strictly verboten, however, to put up your IRA funds as collateral for a loan. If you do borrow money against an IRA, the entire account will be disqualified, and the IRS will eat your lunch. There is no limit to the number of IRAs an individual may establish, and most advisers recommend diversification once you build a sizeable amount.

However, an IRA is no place for adventurism. Losses will not be deductible, since contributions to the account are already shielded from taxes anyway. By the same token, there will be no tax advantage to longterm capital gains in an IRA. An IRA is an opportunity to allow compound interest to do its work in relatively safe investments.

You can start IRAs in a number of types of institutions. At the outset, a bank or savings and loan is the likely choice. They offer safety, convenience, and fairly competitive rates of return for relatively small amounts. As your account grows, you may want to diversify. (Bear in mind, also, that bank accounts are insured only up to a total of \$100,000. Normally, this applies to *all* accounts in each depositor's name. IRAs, however, count separately. You will be insured for up to \$100,000 for your IRA and up to \$100,000 for your other accounts.) Most institutions do not charge fees for setting up or maintaining an account. (You'll probably be opening an account that would be available on a taxable basis, and the bank knows you probably won't be making withdrawals, so it's a good deal for them too.) A few do charge maintenance fees, and most levy a charge for transferring your account elsewhere. Check in advance.

Banks and S&Ls offer a variety of accounts suitable for IRAs, and there may be more difference among institutions than you would expect. Shop around. If you think interest rates will drop over the next year or two, you might want to lock in a high interest rate with a long-term certificate of deposit. If you believe rates will rise, you will probably choose a money market account or a variable-rate CD.

Mutual funds are the second most likely home for your IRA. You may want to select an account that gives you access to a group of funds, so you can shift your investments back and forth—from a stock fund to a money market fund, for example—as economic conditions change. A money market fund may offer a slightly higher yield than a bank money market account. The risk will be slightly higher, since the fund will not be insured, but money market funds are safe to the point of diminishing concern. A no-load stock fund that invests conservatively, for income, is another possibility. Steer clear of funds that charge commissions every time you make a deposit. They have no significant advantages over no-load funds; they're just more expensive. Obviously, a tax-exempt fund would be a poor choice, since they offer lower yields, and your IRA is tax-sheltered anyway. Growth stock funds, which

manage investments for capital gains, are also a poor choice. The tax advantages of long-term gains are of no value in an IRA. Almost all mutual funds charge maintenance fees. This tilts the balance in favor of financial institutions for small IRAs.

You may also set up an IRA at a brokerage house and manage your own stock transactions. However, such an account is probably impractical until your IRA becomes substantial. Most houses charge annual maintenance fees, typically \$50; and commissions on small stock transactions are hefty. You would also run the risks that accompany a lack of diversification. Experts recommend against this approach before your IRA reaches at least \$10,000, preferably \$20,000.

Zero-coupon bonds are also well-suited to IRAs. These bonds sell at a small fraction of their face value, and interest is added until the bonds reach their face value at maturity. Outside an IRA, you must pay taxes on this interest each year, even though you do not actually receive it. After your account reaches \$10,000 or so, you may want to make long-term investments in the stock market. Before that point, you won't be able to afford adequate diversification to play the stocks.

Finally, insurance companies are trying to horn in on the IRA bonanza with annuities. Many advisers flatly recommend against insurance company IRAs for two reasons: 1) annuities offer tax deferments anyway, so why use up your IRA contribution to buy one? and 2) insurance companies often charge stiff fees, levy heavy penalties for transferring your IRA to another custodian, and, over an extended period, may not offer competitive rates of return. If you want an annuity, you can buy one separately from your IRA or use your accumulated IRA funds for a lump-sum purchase of an annuity when you retire.

Overall, it's tough to find a better deal than an IRA anywhere. It's obviously not a suitable place for your emergency reserve, but it is probably the first investment you should make, once you've set aside an emergency fund sufficient to carry you three to six months in event of a catastrophe.

Keogh Plans

Keogh plans are a close relative—ancestor, actually—of IRAs. They offer the same tax advantages and grow at the same pace at any given interest rate. The critical difference is that Keoghs may be used only to defer taxes on self-employment income. Self-employment is defined as income earned by selling goods or services in a non-incorporated business. Dividends and interest are not self-employment income. If you are self-employed or work for a company and earn outside self-employment income, you may set up both an IRA and a Keogh and make maximum contributions to each. Self-employed people with no other pension plan would be well-advised to do so.

The main advantage of a Keogh plan is that contribution limits are much higher than for an IRA. You may shelter 25% of your self-employment income, up to a maximum annual contribution of \$30,000. (To determine how much your plan will accumulate over time, use the IRA tables in this chapter and in Chapter 5, multiplying the totals in proportion to your annual contributions. For example, if you contribute \$10,000 a year, multiply the figures in the IRA table by five.) Using both Keoghs and IRAs, self-employed spouses earning at least \$120,000 each could shelter as much as \$64,000 a year. If your income from all sources is less than \$15,000, you may contribute your first \$750 of self-employment income to a Keogh plan without regard to the 25% limit. You may also overcome the 25% limit by setting up a "defined benefit" plan, designed to give you a certain fixed monthly income after you retire. The limits on contributions to such a plan are based on actuarial tables and are too complicated to explain here. See your banker or accountant.

There are several other differences between Keoghs and IRAs:

- If you have employees who have worked for you at least three years, you must include them in the plan on an equal percentage basis. If you continue to have self-employment income after age 70½, you may continue to make contributions to your Keogh, although you must also begin making withdrawals to avoid tax penalties. (No contributions may be made to an IRA after you reach 70½.)
- If you are eligible for a Keogh this year, you must set up the plan by December 31, although you may make contributions until April 15 of next year.
- If you take a salaried job and no longer earn self-employment income, you must discontinue contributions to your Keogh. (You may still make contributions based on outside self-employment income, however.) Nevertheless, you may allow the contributions you have already made to continue collecting interest until your retirement.
- If you take a lump-sum distribution from your Keogh plan after you reach 59½, you may use a special ten-year income averaging technique, provided you have had your plan for at least five years. The calculation of taxes is rather complex, but the tax advantages are such that it may be worthwhile to make a lump-sum withdrawal, even if you continue making contributions to your plan. Under current schedules, the ten-year averaging tax rate on a lump-sum withdrawal is more than likely to be well below 10%. Not bad. (IRAs are not eligible for ten-year income averaging.)
- As with an IRA, you may transfer your account from one custodian to another, provided the transfer is made directly by the institutions. (With an IRA, you may take possession of the funds for up to sixty days, although the usefulness of this provision seems fairly limited.)

Salary Reduction Plans

Salary reduction plans (also known as "401K" plans) are a variation on Keoghs for people who work for an employer. If your employer offers this program, you may request that up to 10% of your salary be placed in a trust fund, where it will accumulate interest tax-free. Your company may match all or part of your contribution. (If it does, you're being offered a very attractive opportunity. And, yes, you may still have an IRA.)

Unlike IRA or Keogh contributions, SRP contributions are not reported to IRS. This means that you will escape paying Social Security taxes (if your income is below the maximum taxable amount) as well as income taxes. This may eventually reduce your Social Security benefits. Unless your income is very modest (say, around \$12,000), however, you'll probably earn a considerably higher return by investing that money in a retirement account than you would by paying the taxes. Modest-income people have relatively little need for tax shelters, anyway, so the prospect of reduced Social Security benefits may be an important factor in their case.

As with IRAs and Keoghs, tax penalties discourage withdrawals before you reach 59½. However, SRPs offer loopholes absent in the other retirement plans. You make withdrawals without penalty "to stave off hardship" in the event of an "immediate and heavy need." There is no consensus as to what that means, although an IRS ruling is expected. It probably will not turn out that you can claim you need a swimming pool to stave off hardship. You may also make withdrawals without penalty if you change employers.

Like Keoghs, SRPs also qualify for highly favorable ten-year income averaging, if you withdraw a lump sum after age 59½.

Annuities

Unlike IRAs and Keoghs, you invest *after-tax* funds in annuities. Thus, you may want to consider annuities only after you have made contributions to a fully tax-sheltered account. Nevertheless, annuities allow interest to compound tax-free at rates that are usually about one point below rates paid by taxable corporate bonds.

Annuities guarantee periodic payments for a specified period; for your lifetime; or for the lifetimes of you and your spouse, whoever lives longer. Annuities can be bought for as little as \$1,500, but, as a practical matter, you should plan to set aside at least \$5,000. Annuities are offered by insurance companies and sold by most stock brokers. If you buy from a broker, the insurance company will pay the commission.

The most popular form of annuity in the last couple of years has been the single-premium deferred annuity, which works more like a tax-exempt bond than a traditional annuity. You pay a lump sum, which accrues interest until the contract date. You may elect to recoup your investment in a single

payment, or in periodic installments. Tax on the interest is deferred until you collect your earnings.

Annuities have been considered among the safest investments you can make without a government guarantee. Insurance companies are regulated by the states, and maintaining liquidity is one of the primary purposes of regulation.

However, the 1980s have been difficult times for life insurance companies, and they have attempted to diversify from stodgy whole life policies, in order to compete with the array of opportunities vying for investors' attention. When Baldwin-United Corporation, one of the pioneers of SPDAs, filed Chapter 11 bankruptcy in March 1983, the courts quickly discovered that the assets backing \$4 billion in SDPAs were less than the company owed its creditors. Later, Charter Company, the leading SPDA vendor, filed Chapter 11 after its oil refining business bellied up.

Such difficulties are not limited to a handful of companies. In June 1984, *BusinessWeek* reported: "[T]he biggest threat to the life insurance industry may be coming from within. With no federal safety net, the promise backing an insurance policy [which would include annuities] is only as good as the company making it. In the midst of mounting turmoil in the marketplace, many companies today know they are struggling for survival....Many in the industry concede that hundreds of the 1,900 U.S. insurance companies—mainly small and mid-sized ones—are doomed. 'There is a big shakeout coming,' says Kenneth C. Nichols, president of Home Life Insurance of New York. 'We have gone from the comfort zone to the combat zone, and mediocrity can no longer survive'."

If you are considering an annuity—or a life insurance policy—pick your company carefully.

Some financial advisers are skeptical about annuities in any case. The initially attractive interest rate may drop once you're locked into the program. You might have to pay a significant front-end fee. (This is no longer universal; shop for an annuity that doesn't require a commission up front.) You will probably have to pay a penalty to get out of an annuity deal, especially if you want out in the first few years. Typical annuities charge a 7% penalty for withdrawal in the first year, 6% in the second, 5% in the third, and so forth. You will also have to pay a 5% tax penalty, if you withdraw money from an annuity before you are 59½ and the annuity is less than ten years old.

Nevertheless, annuities can be attractive if you're in a high tax bracket, especially if you want to be certain you will not outlive your retirement income. Meanwhile, you usually will be able to borrow against the accumulated value of your annuity. You may also be able to make withdrawals—to help pay for college, for example—and still watch the value of your annuity grow.

Annuities come in several varieties, and, even within each group, not all deals are created equal. Some deals, in fact, are abysmal. Once you choose

the type of annuity you want, it's important to shop around to get the best deal. Let's look first at types of annuities, then at desirable features.

An annuity may begin payments immediately, or payments may be deferred until a specified date. Immediate annuities are always purchased for a lump sum. Deferred annuities may be purchased with a single payment or paid for in installments. Single-premium deferred annuities are most common. You may receive annuity payments in several ways:

- A single payment when a deferred annuity matures.
- Life: monthly payments for your lifetime.
- Life with ten years certain: monthly payments for life, with payments guaranteed for ten years. If the purchaser dies, the remaining benefits go to the beneficiary.
- Life-refund: payments for your lifetime with a guarantee that payments will equal at least the purchase price of the annuity. Any refund goes to survivors.
- Joint survivor: payments for the lifetime of you or your spouse, whoever lives longer.
- Wraparound annuity: allows you to choose a mutual fund in which the insurance company will invest your money. If you choose a family of funds, you will be able to switch from one to another.

For a man who begins receiving annuity payments at age 65, a life annuity will yield the highest monthly payment. A joint survivor annuity will pay the least, about 25% less if the man's wife is the same age. (The actuarial tables say the odds are that the man will die first.)

According to the American Council of Life Insurance, a \$10,000 single-premium annuity collecting 10% interest will yield a one-time payment of \$41,772 after fifteen years. For a 65-year-old couple, monthly payments would range from \$520 for the life of the man to \$390 for a joint survivor annuity. A comparison to consider: at 10% tax-free interest, the \$41,772 would produce a yield of about \$348 per month. You could collect that amount forever, since you would be withdrawing only the interest.

An annuity that begins payments immediately is pretty much a wager between you and the insurance company: you're betting you'll live longer than the actuarial tables say, the company is betting not. Read the fine print, look at the table, and figure the odds.

Deferred annuities are long-term investments with a fairly high yield, but unrest has recently come to an industry whose principal asset is stability. Only the assets of the company from which you buy your annuity stand behind your investment. And, even if the company is secure, you must be prepared to allow money to accumulate in your annuity for many years. Interest rates, the period for which interest is guaranteed, and penalties for early withdrawal vary considerably.

An annuity is worth considering if 1) you want to make certain you do not outlive your income, 2) you have several thousand dollars you can set aside

for a long period, 3) your tax bracket is high enough to make the annuity's tax-free yield more attractive than taxable investments with similar risks, and 4) you have already contributed the maximum to your IRA and/or Keogh plan (whose contribution deduction will result in a dramatically higher effective yield than you are likely to earn on a non-tax-deferrable contribution to an annuity).

Transferring Income to Other Family Members

It costs a bundle to send a child to college. Most estimates are in the range of \$5,000 a year (probably optimistic) at public universities and twice that (which won't even pay the tuition at some schools) for private colleges. Roughly, then, you'll need about \$20,000 (in 1984 dollars) to send the youngster to a public university or \$40,000 for a private school. Optimistically.

Let's see, your marginal tax rate is 40%, whereas daughter Susie's, if she's like most one-year-olds, is nil. She would pay no tax on her first \$1,000 in investment income (the personal exemption)—or the first \$1,200, if the income is dividends (the dividends exclusion). Even after that, her tax rate would be very low. Hmmm. Investments would certainly accumulate compound interest more quickly if they were taxed at her tax rate (nothing) than at yours. An investment yielding 10% interest for her would produce an after-tax yield of only 6% for you. She could accumulate \$40,000 in eighteen years by setting aside \$877 a year, or by investing a little less than \$7,200 now. You, on the other hand, would have to save nearly \$1,300 a year, or invest about \$14,000 now. (Divide by two in all cases for a \$20,000 fund.) If you save \$1,000 a year at 10% interest, the college fund will total about \$30,900 after eighteen years. If she saves the same amount, the fund will total \$45,600—a difference of about \$14,700. (If you are using the IBM version of *The Home Accountant*, the forecasting feature will allow you quickly to figure any combination of years, interest rates, and tax brackets.)

Yes, it can be arranged. There are two ways, actually: giving the money to the child (or investing it in her name), and setting up a trust (where the principal eventually reverts to you, but she keeps the investment income). Until the 1984 tax law, a third option was to give the child an interest-free loan, which she could invest. Congress put the quietus on that play. These ploys have drawbacks, especially if you're worried that Susie will quit college and head for Greece with the loot on her nineteenth birthday.

Setting up a trust fund requires the services of a lawyer, which can be expensive, so this strategy is suitable only for fairly hefty sums. You should also consult an accountant or other tax adviser before giving your children large gifts—say, five figures.

Although income transfers are ideally suited for building education funds, they can be used for any purpose. The following tactics can be used with elderly parents as well as children.

Gifts

The simplest way to transfer funds to your children is to give them money and set up savings (*not*, presumably, 5.5% passbook savings accounts) or brokerage accounts in their names. Gifts must be made from after-tax income, but once the transfer is made, interest or other investment returns will accrue to the child. (The child will have to have a Social Security number. One is easily obtained from your local Social Security office. All you'll need is a birth certificate. You'll also have to file annual tax returns for the child.)

You may give up to \$10,000 a year to any individual without incurring any federal gift tax. A couple may jointly give an individual up to \$20,000. There is no limit to the number of persons who may receive gifts; the limit is per recipient. You may make even larger gifts without paying gift tax, if you're willing to increase the estate tax your heirs may have to pay. In 1984, heirs must pay taxes only on estates exceeding \$325,000. That figure will rise to \$400,000 in 1985, \$500,000 in 1986, and \$600,000 from 1987 on. Gifts exceeding the \$10,000/\$20,000 limits will be taxable as part of your estate when you die. Unless your gifts are quite large and/or your estate is substantial, gift taxes may not be a major consideration.

You need not limit gifts to cash. If you give your children securities or other assets that have appreciated in value, they will be taxed at the children's capital gains rate when sold.

Custodial Accounts

There are two problems with outright gifts: they are irrevocable, and you and the recipient may not agree on how the money should be spent. There is no solution to the first. You have no legal recourse for recovering the money. The second is easily solved by setting up a custodial account at a bank or brokerage house. (If you set up a brokerage account, you may also need a bank account to accommodate the child's earnings.) Setting up an account is a simple matter of filling out forms available at any brokerage house or bank. Again, the child will need a Social Security number.

A custodial account is under your supervision or the control of an adult custodian specified by you. The child cannot touch the money or other assets in the account until he reaches the age specified by your state's version of the Uniform Gifts to Minors Act. In most states, that age is twenty-one, even if the legal age of majority is eighteen for other purposes. In a few states, a child may claim a custodial account at eighteen. Once the child reaches the specified age, however, the child assumes control, and your right to determine how the assets are used comes to an end.

The custodian has full control over how funds from a custodial account are spent. However, if the money is spent for food, clothing, housing, or other needs that are part of the parent's legal obligation to support the child, those expenditures will be taxed at the parent's tax rate. Usually, a custodial account may be used to cover college expenditures without losing the tax

advantages of the account. However, laws vary from state to state, and the legal requirement for support may or may not continue past age eighteen in your state. You should be certain of the rules in your state before establishing a custodial account. Some advisers recommend that you consider naming a relative or close friend as custodian. If you are custodian and die before the child assumes control of the account, it will be taxed as part of your estate.

Custodial accounts are very easy to set up, but think carefully before you do so. Familiarize yourself with applicable state laws, and take into account that you may inadvertently wind up financing a trip to Greece or a Harley hog rather than the college education you intended.

Short-Term Trusts

Short-term trusts, also known as Clifford trusts, allow you temporarily to assign money or assets to a child. The child reaps the earnings while the trust is active, but you can reclaim the principal after ten years and a day. (The life of the trust will be extended if you add assets after it is established.) Meanwhile, you enjoy the same tax benefits on earnings as you would if you gave the contents of the trust to the child, except that capital gains will be taxed at your rate rather than the youngster's. Clifford trusts are managed by a trustee, which might be a bank or a friend.

Setting up a Clifford trust is fairly complicated and requires the services of an attorney. The fee may be as high as \$1,000 but is usually in the \$300 to \$500 range. There will be annual trustee fees as well. The arrangement is thus suited only for fairly large sums.

Why not just buy tax-exempt municipal bonds and give the interest to the children? Given the complexity of Clifford trusts and the forfeiture of control of your assets for ten years, the trust will have to earn a substantial income to justify the trouble. Some advisers suggest that a trust may be worth the hassle if municipals are paying 10% and the trust can earn 13% or more.

The IRS lies in ambush behind all sorts of rocks and bushes. The \$10,000/\$20,000 annual gift tax exemption applies in a complicated way to Clifford trusts. *Money* magazine calculates that the current (as of mid-1984) IRS rules allow an individual to contribute up to \$16,275 and a couple to contribute up to \$32,550 to a trust without incurring gift tax. The trust may also have to pay taxes at a higher rate, if the trustee reinvests income rather than distributing it to a custodial account in a child's name.

As with custodial accounts, trust income will be taxed at your tax rate if the IRS finds that it is used to provide legally required support for the child. Paying college costs usually are not part of a parent's legal obligation, but state laws vary. In any case, you can usually avoid the problem entirely by starting a trust when your child is seven or eight, and closing it before the child enters college. At that point, you cannot be taxed on trust income, because there no longer is any trust income to tax.

Seek professional advice before setting up a Clifford trust. You should make certain it is set up to meet your objectives and the laws of your state.

Interest-Free Loans Probably Doomed

In the past, interest-free loans were a popular way to transfer the use of assets to children, so that investment income would be taxed at their tax rates. Such loans, sometimes called Crown loans, were payable on demand, and had to meet a stringent set of IRS requirements. The IRS fought interest-free loans for years, and the 1984 tax law probably dooms Crown loans. A lawyer was required to set up the loans, anyway, and the fees were fairly steep, in the \$500 range. *Do not* attempt this tactic without getting competent advice on the new law.

Most income transfers to children require a certain degree of trust between parent and child. In all of these cases, the child is likely to wind up with control of substantial sums of money. You must also consider the possibility that you may not be able to claim your child as a dependent on your own tax returns after he reaches nineteen, if the investments you have arranged on his behalf, plus any earnings of his own, provide more than half of his support.

For many parents, legal protections, except where the child cannot get access to the money on his own, may not be a significant protection. How aggravated would you have to be to sue your kid? On the other hand, how much will it strain your relationship if you set up some arrangement that might suggest mistrust? These are highly personal questions. But you might ask yourself whether you're willing to make even a temporary transfer of assets you couldn't comfortably do without for your own retirement. When you take into account the potential loss of needed assets and the possibility of family discord, you may decide that the tax breaks are not worth the price.

Tax Shelters

There are deals, typically limited partnerships in commercial real estate or oil and gas drilling, that promise huge tax write-offs and large long-term capital gains. They're called tax shelters. Unlike the tax strategies discussed so far, tax shelters are general-purpose investments. Because they are often risky, in fact, they are not particularly well-suited to building funds for education, retirement, or other long-term needs. They are included here, rather than under the heading of tax-preferred investments, because they offer immediate (or nearly immediate) write-offs, while tax-preferred investments offer tax advantages only on the income they produce.

These are shark-infested waters, and, if you don't get bit by an unscrupulous promoter, you're liable to run aground on the shoals of the IRS. Some investment advisers offer lists of traps to watch out for that run into several pages. Even sound, legitimate tax shelter deals are usually far riskier than most other types of investment.

Despite these risks, you *may* want to consider a tax shelter deal if you're in the top tax brackets. Some advisers say shelters are worth considering if your

marginal tax rate is 42% or above. (In 1984, that would be a taxable income of \$41,500 for single taxpayers, \$60,000 for couples.) Others say to forget it unless your tax bracket is in the 50% range. (For singles, \$81,800; for couples, \$162,400. However, singles reach 48% at \$55,300, and couples hit 49% at \$109,500.)

How does a tax shelter work? A limited partnership is managed by a general partner, who makes the business decisions for the investment group. The investors are limited partners. In compensation for their investment, they receive tax credits and deductions and, if the venture is successful, a profit, usually in the form of a long-term capital gain. Investors' liability is limited to the amount they invest. The partnership's creditors can't get at the investors' personal property.

In addition to real estate and oil and gas deals, limited partnerships commonly invest in equipment leasing, research and development, mining, movies, cattle, and race horses. It's usually safer to stick to real estate, oil, and gas. The more exotic the deal, the higher the risk is likely to be.

The tax breaks that come early are derived from accelerated depreciation, depletion allowances (the equivalent of depreciation for oil and gas wells), investment tax credits (in the case of equipment, but not real estate), and operating expenses. After a period of time, often five or six years, the partnership is dissolved, and the asset is sold in hope of a profit. Since the partnership will have owned the asset for an extended period, the profit to the investors is taxed as capital gains, so the maximum rate is 20%. Not a bad deal—if everything goes according to plan.

There are, in fact, excellent tax shelters available, but assessing a deal requires a great many judgment calls on the specific arrangement. To be a good investment, a tax shelter must be economically sound. This means that the arrangement must be structured to *make money*, and not merely to take advantage of tax breaks. It must also be fiscally and legally in order and managed by an experienced general partner whose record holds up to scrutiny. You'll need to enlist professionals familiar with the type of shelter you're considering: an accountant, a lawyer, and perhaps a real estate appraiser.

A lot of people have bought Florida swamp land, and misrepresenting an asset is far from the only way a promoter can foul up a tax shelter. It's better to pass up a good deal than to risk investing in a con. Use your common sense.

Warnings:

-
- Never—*never*—invest in a shelter offered, unsolicited, through the mail or over the telephone. (This hardly bears saying, but, if it's such a great deal, why does the promoter need a mailing list to peddle it? And so what if, despite the odds, the proposition actually is a fairly good deal? There are plenty of other opportunities.)
 - Don't be greedy. Avoid deals promising tax write-offs of more than \$1.50

for every \$1 you invest. Anything higher invites an IRS audit, and the 1984 tax law clamps down on tax shelters that promise write-offs exceeding your investment. Two important provisions: interest and expenses charged against one year but paid later are disallowed, and the depreciation for investment real estate (except low-income housing) is extended from fifteen years to eighteen. An audit can be a serious hassle, and, if your deductions are disallowed, you may have to pay penalties and interest of up to 30%, in addition to losing the write-off. Besides, the old saw holds: if it looks too good to be true, it probably is. Even if the deal is completely legitimate, the return is likely to be proportional to the risk.

- Consider shelters early in the year, when the soundest deals are offered. The sharks' feeding frenzy occurs at the end of the year, when many naive investors finally start worrying about their taxes. Year's end is also when legally legitimate but economically shaky propositions tend to appear. The greatest allure of these deals is often their tax write-offs, which means they are dubious investments.
- Don't invest money you can't afford to lose.
- Invest as the partnership is being formed, and be prepared to stay with the deal until the property (whatever it is) is sold. Most of the tax breaks occur early in the partnership's life. Your share of the investment will be difficult to sell before the partnership is liquidated, for two reasons: the decline in write-offs, and the difficulty in determining the value of your interest.
- Do not invest in distant real estate. (Would anybody have bought swamp land if they'd seen it?) You'll be better able to keep tabs on the management of the partnership if it's close to home.
- Consider alternatives. Would you come out just as well with a far safer investment in a duplex down the road? Do you really need a tax shelter? Have you taken full advantage of IRAs and Keoghs?
- Beware the Alternative Minimum Tax. (See Chapter 7.) Congress and the IRS weren't born yesterday. The Alternative Minimum Tax is designed to assure that high-rolling investors will pay some tax (the maximum rate is 20%), even if they invest extensively in tax shelters and other tax-preferred investments. The Alternative Minimum Tax can significantly reduce the value of tax shelters.
- Caveat emptor. Use your common sense. Seek professional advice. Be careful.

Rental Real Estate

More modest real estate developments offer many of the same tax shelters as a several-million-dollar apartment complex. Even a humble duplex offers accelerated depreciation, income and property tax writeoffs, and deductions on insurance and repairs.

Your investment is also leveraged, since it is financed with borrowed money. You may realize a sizeable profit, taxed at favorable capital gains

rates, when you sell. The 1984 tax law extends the depreciation period for real estate to eighteen years from fifteen. (You depreciate only the buildings, not the land.) The new accelerated depreciation (ACRS) schedule is not available at this writing. Under the old law, however, ACRS resulted in more rapid depreciation than a straight-line calculation for five years, but smaller depreciation deductions thereafter. The cross-over is about the time you might consider selling.

The Home Accountant and *The Tax Advantage* are well-suited to managing investments in up to three small residential properties. You can set up asset and expense categories in your regular *Home Accountant* budget or set up an entirely separate accounting system for your investment. Budget categories that can be transferred to *The Tax Advantage* track Schedule E. (See Figure 8-5.) Note that each category ends in /T/*. In practice, the asterisk must be replaced with A, B, or C to designate which property the category is for.

SCHEDULE E
RENTS RECEIVED/T/*
ROYALTIES RCVD/T/*
ADVERTISING (PR)/T/*
AUTO TRAVEL/T/*
CLEANING (PR)/T/*
COMMISSIONS (PR)/T/*
INSURANCE (PR)/T/*
INTEREST (PR)/T/*
FEES (PR)/T/*
REPAIRS (PR)/T/*
SUPPLIES (PR)/T/*
TAXES (PR)/T/*
UTILITIES (PR)/T/*
WAGES (PR)/T/*
EXPENSES (PR)/T/*

Figure 8-5: *Tax Advantage* categories for investments in rental properties (Schedule E). The asterisks must be replaced with A, B, or C to designate the property.

ALT. MIN. TAX

*** FORM 4562-[A] - PROPERTY DEPRECIATION ***

FRANK SMITH
MARY SMITH

SSN:111-111-111
SSN:222-222-222

LINE 2F 15-YR REAL PROPERTY . 2F 10,788

ITEM 1 OF 1

DATE IN SERVICE: 1-1-83
COST OR BASIS : 89900
RECOVERY PERIOD: 15
METHOD : ACRS
PERCENTAGE : 12
DEDUCTION : 10788

Figure 8-6: Calculating the first year's depreciation on the duplex the Smiths bought on January 1, 1983. First-year depreciation under the fifteen-year ACRS schedule is 12%. The 1984 tax law extends the depreciation to eighteen years.

Real estate appreciation (inflation working for you instead of against) has slowed, and interest rates are much higher than they were in the 1970s. As a result, rental properties aren't as lucrative as they were. It may be difficult to come up with a positive cash flow before a few years of rent increases. Still, it's possible to achieve the happy situation of a positive cash flow and a paper loss, for tax purposes.

Figures 8-6, 8-7, and 8-8 are 1983 *Tax Advantage* forms for a hypothetical duplex bought by Frank and Mary Smith on January 1, 1983. The sale price was \$89,900, and each unit is rented for \$500 a month, or \$12,000 a year for the two. Interest, taxes, and miscellaneous expenses come to \$10,685, leaving a barely positive cash flow. But depreciation gives the Smiths a substantial tax write-off.

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ALT. MIN. TAX

*** FORM 4562-[A] - PROPERTY DEPRECIATION ***

FRANK SMITH
MARY SMITH
SSN:111-111-111
SSN:222-222-222

> PART I-DEPRECIATION <

> A-EXPENSE PROPERTY <

1 EXPENSE DEDUCTION . . . . . 1 0

> B-DEPREC. PROPERTY <

> ACRS <

2A 3-YEAR PROPERTY . . . . . 2A 0
2B 5-YEAR PROPERTY . . . . . 2B 0
2C 10-YEAR PROPERTY . . . . . 2C 0
2D 15-YR PUBLIC UTILITY . . . . . 2D 0
2E LOW-INCOME HOUSING . . . . . 2E 0
2F 15-YR REAL PROPERTY . . . . . 2F 10,788
3 SECTION 168(E)(2) . . . . . 3 0
4 TOTAL . . . . . 4 10,788

> C-NONREC. PROPERTY <

5 CLADR . . . . . 5 0
6 OTHER DEPRECIATION . . . . . 6 0
7 TOTAL . . . . . 7 0
8 SECTION A, LINE 1 . . . . . 8 0
9 SECTION B, LINE 4 . . . . . 9 10,788
10 TOTAL . . . . . 10 10,788

> PART II-AMORTIZATION <

1 AMORTIZATION . . . . . 1 0

```

Figure 8-7: Entering depreciation on Form 4562.

Depreciation, incidentally, actually defers taxes rather than eliminating them. Depreciation is deducted from your basis in the property, increasing the taxable gain when you sell it. But the gain is taxed at only 40% the rate you pay on ordinary income, so it's still a good deal.

One other thing: if you buy a duplex on your own, you'll be responsible for repairs, collecting rent, dealing with tenants, and whatever contingencies arrive. This calls to mind the advice of Billy Rose, a millionaire and entertainment producer: "Never invest your money in anything that eats or needs repairing." While not the final word, it's something to consider.

ALT. MIN. TAX

*** SCHEDULE E - SUPPLEMENTAL INCOME SCHEDULE ***

FRANK SMITH
MARY SMITH

SSN:111-111-111
SSN:222-222-222

> I-RENT & ROYALTY <

3A- 20 ITEMIZE PROPERTY	3A-		I
3 INCOME.	3	12,000	
17 EXPENSES.	17	10,685	
18 DEPRECIATION.	18	10,788	
21 ADD PROFITS.	21	0	
22 ADD LOSSES.	22	9,473	
23 COMBINE 21 & 22.	23	-9,473	
24 FARM RENTAL PROFIT.	24	0	
25 TOTAL.	25	-9,473	

> II-INCOME OR LOSSES <

26 PARTNERSHIPS.	26		
26D NET LOSS.	26D	0	
26E NET INCOME.	26E	0	
27 COMBINE LINE 26.	27	0	
28 SEC. 179 DEDUCTION.	28	0	
29 TOTAL.	29	0	
30 ESTATES OR TRUSTS.	30		
30D NET LOSS.	30D	0	
30E NET INCOME.	30E	0	
31 TOTAL.	31	0	
32 S CORPORATIONS.	32		
32D NET LOSS.	32D	0	
32E NET INCOME.	32E	0	
33 COMBINE LINE 32.	33	0	
34 SEC. 179 DEDUCTION.	34	0	
35 TOTAL.	35	0	

> III-WINDFALL PROFIT <

36 CREDIT OR REFUND '83.	36	0
37 WITHHELD IN '83.	37	0
38 COMBINE 36 & 37.	38	0

> IV-SUMMARY <

39 TOTAL INCOME.	39	-9,473
40 FARMING AND FISHING.	40	0

ALT. MIN. TAX

*** PROPERTY-[A] ***

FRANK SMITH
MARY SMITH

SSN:111-111-111
SSN:222-222-222

> INCOME <

3A RENTS RECEIVED.	3A	12,000
3B ROYALTIES RECEIVED.	3B	0

> EXPENSES <

4	ADVERTISING	4	0
5	AUTO AND TRAVEL	5	0
6	CLEANING	6	0
7	COMMISSIONS	7	0
8	INSURANCE	8	378
9	INTEREST	9	8,342
10	FEES	10	0
11	REPAIRS	11	278
12	SUPPLIES	12	0
13	TAXES	13	1,687
14	UTILITIES	14	0
15	WAGES AND SALARIES	15	0
16	OTHER EXPENSES	16	0
17	TOTAL EXPENSES	17	10,685
	DEPRECIATION		0
	DEPRECIATION [4562]		10,788 I
18	DEPRECIATION	18	10,788
19	TOTAL	19	21,473
20	INCOME OR LOSS	20	-9,473

Figure 8-8: Schedule E shows a positive cash flow, but a tax loss for the Smiths' duplex. Actual expenses come to \$10,685, but the deduction for depreciation is \$10,788, creating a \$9,473 loss for tax purposes.

It's hard to love the Internal Revenue Code, but it does have a few good deals for ordinary folks.

Congress thinks home ownership is the American way, and it has agreed to pay up to half the interest on your mortgage (if you're in the 50% bracket) through tax deductions. Most states will chip in a couple of points through their own tax breaks. You get great breaks on capital gains tax when you sell your house, too. The taxes are deferred if you buy a house, and you're eligible for a one-time exemption of \$125,000 after you turn fifty-five.

It's also national policy to encourage you to save for retirement, and that should be one of your financial priorities, even if there weren't these terrific tax deals. IRAs, Keoghs, and Salary Reduction Plans are even better deals than the tax breaks on home ownership. The government will, in effect, contribute up to 50% of your retirement savings, matching you dollar for dollar, if you're in the top bracket. It's too good to pass up, considering that you definitely should be saving for retirement, anyway.

The tax breaks available if you're building a college fund are more intricate, and are not the result of deliberate policy to promote education. Nevertheless, you can save on taxes by transferring income to your children. These tactics are complex enough to warrant the assistance of a lawyer or an accountant, and all of them have drawbacks. Think about it carefully before you act.

Tax shelters give investors business tax breaks not otherwise available to individuals. They can be very dangerous, and some of the deals, most likely to appear in the year-end frenzy, are scams or little better. In addition, the new tax law clamps down on shelters that offer write-offs much larger than your investment. The market knows all this, and it's open to question whether you'll earn any more than a fair price for the risk you're actually undertaking.

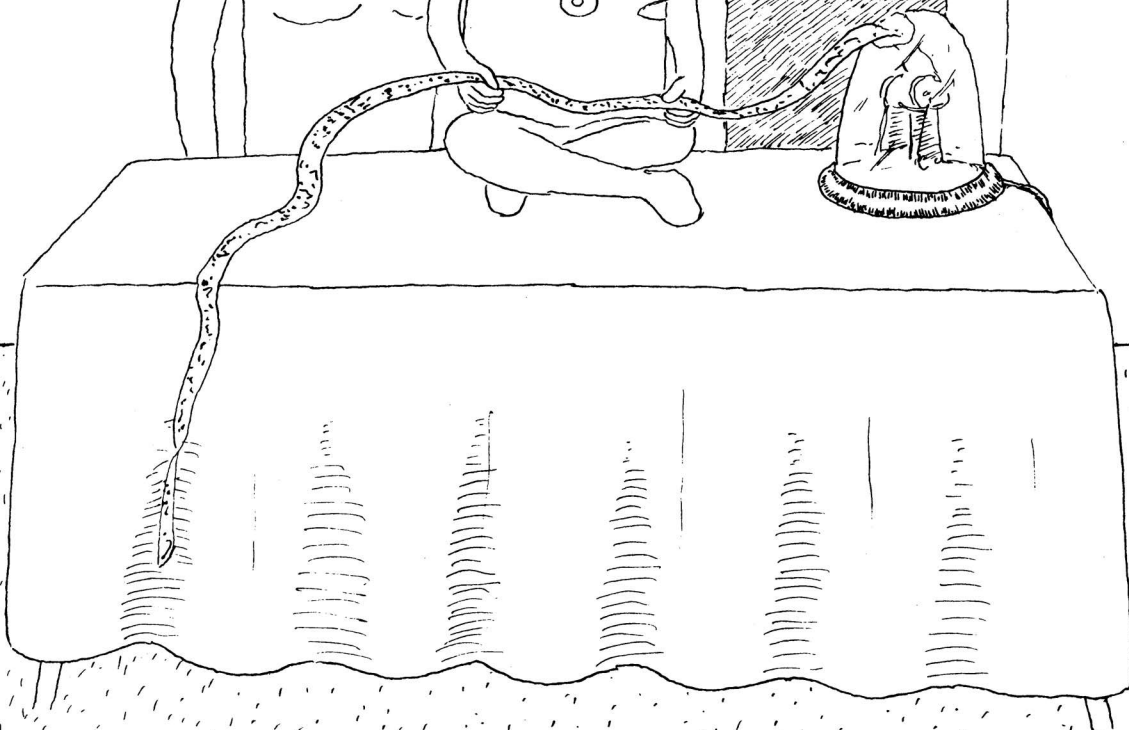
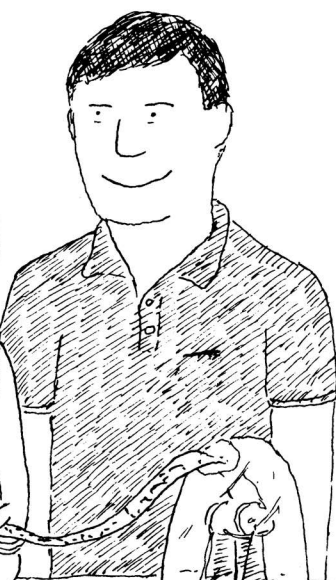
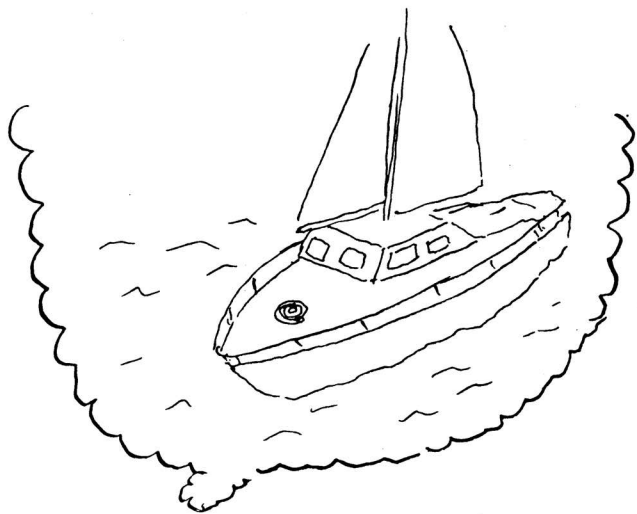
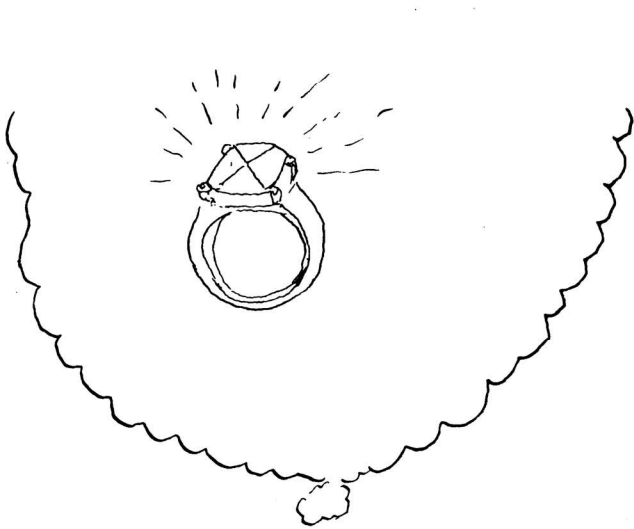
Caution is the word. Tax shelters make sense only for people in the top income brackets. Ask yourself whether you really need a tax shelter. If the answer is yes, look for a tax shelter that is a sound investment, independent of its tax breaks. Don't be blinded by promises of tax savings.

Investments in smaller rental properties offers some of the tax breaks of tax shelters at less risk. Returns are not as high as they were in the seventies, however, and you are responsible for repairs and management.

Tax breaks are great, if they dovetail with your financial objectives. But you shouldn't let tax consequences distort your financial planning. It may be that your best investments are garden variety stocks and bonds. These carry their own tax benefits, but those aren't the primary reasons for buying them. In fact, stocks and bonds probably have a place in any sizeable portfolio.

Rules of Thumb and Key Points

- The maximum contribution to an IRA is \$2,000 per worker, or \$2,250 for a one-income married couple. Contributions may be made until you file your tax return.
- The maximum contribution to a Keogh plan is 25% of your self-employment income, up to a maximum of \$30,000. You may have both a Keogh and an IRA. Accounts must be opened by the end of the tax year, but contributions may be made until you file your return.
- You can save taxes on your college fund by transferring income to the children, but the available methods have drawbacks. Plan carefully. The once popular interest-free loans are out.
- Avoid tax shelters claiming write-offs of more than 1.5 to 1.



9 PLAYING THE MARKETS

Prepare NOW for Deflation
PREPARE FOR AN EXPLOSION... (But don't assume future results will match past.)

—Two advertisements for investment advice in the same issue of *Barron's*. So you're tired of all this tedious planning. Now you're looking to make a killing in the stock market.

I don't know how to do that. I don't think anybody knows how to do that. Some analysts think they can divine the future by studying stock market patterns. They're known as technical analysts. Others think you can pick undervalued companies by studying their performance relative to their stock prices. They're called fundamentalists. It's all rather complicated, but sometimes the analysts are right. Some people have runs at blackjack, too, and they usually lose their shirts if they push their luck.

Still, once you accumulate enough investment capital to play the game, there is probably a place in your portfolio for stocks and bonds—after your other important financial objectives are covered. The stock market comes after you've set aside an emergency fund in a safe, liquid account, arranged for the kids' college, and taken care of housing and insurance. You're not apt to make a killing, but the market is *supposed* to reward risk (stocks) and long-term commitment of funds (bonds). *The Home Accountant* will not help you pick stocks and bonds, but it will help you keep track of your investments.

In the fullness of time—and it may be a considerable time—prudent, cautious investments in stocks and bonds *should* provide higher yields than bank money market accounts and money market funds. From 1926 to 1975, inflation averaged 2.3%. Treasury bills returned 2.3% (breaking even), corporate bonds paid 3.8% (nothing to applaud), and stocks averaged a 9% return. The difference: \$1,000 in bonds would have grown to \$6,200; \$1,000 in stocks, to \$68,200. (These figures are from Andrew Tobias's *The Only Investment Guide You'll Ever Need*. Another writer calculates that, with dividends reinvested, a \$10,000 investment in the stock market in 1926 would have grown to \$900,000 in fifty years.) From '75 to the end of '82, Treasury bills kept pace with the 8.3% inflation rate, while stocks compounded twice as fast (dividends included).

There were a lot of rough spots along the way, of course, when you would have been better off out of the stock market. Some slumps lasted for years. The Dow Jones Average rose very modestly from 995 in 1966 to more than 1200 in 1984. Adjusted for inflation, however, the value of the average stock dropped by more than 50%, to somewhere around 400. You would have

received dividends, of course, but your principal would have eroded. A 5% dividend, reinvested and compounded for eighteen years, would not quite have brought you back to break-even. (Tobias's example, giving pre- and post-'75 averages, breaks right at the worst recession of the decade, when the Dow bottomed out at 578. The Dow has more than doubled since then. It's still not done much better than keep up with inflation, not counting dividends.)

There are no sure things. First let's look at some of the difficulties of investing in the stock and bond markets. A smattering of published stock market advice, passed along verbatim:

- Find a brilliant broker.
- There *are* no brokers who can beat the market consistently and by enough of a margin to more than make up for their brokerage fees. (Which, the author adds later, brings us to the old Wall Street joke about active traders: "Well, the broker made money, and the firm made money—and two out of three ain't bad.")
- Invest in companies that are recognized leaders in their industries.
- Don't buy stocks that "everyone" is recommending... Choose instead bottom-tier stocks. Bottom-tier stocks can't fall out of favor—they are already out of favor.
- If you can't stand admitting you've made a mistake, you may be unsuited for stock market investing. One clever way to save face and funds when it comes time to get out is to rely on a stop loss order.
- Once you have selected ten or fifteen high-yielding, low P/E [price-earnings ratio] stocks—not all at once, remember, diversified over time—sit back and relax. If the stocks go down, you are still getting dividends. And, over the long run, it is likely that most of the stocks will at one time or another be worth a good deal more than you paid for them.
- Buy a few shares of stock in a company with high growth potential. Read its annual reports, interim reports, stockbroker research reports, newspaper and magazine articles. Attend the annual stockholders' meeting.
- But as you won't be able to analyze the [annual] report any better than a pro—who got all this info months ago—why bother? Go out and play, like the other kids.
- Use both technical and fundamental analysis.
- Charts [for technical analysis] look like they should work, but they don't. Everybody uses them anyway, just as everyone consults astrology columns in newspapers... Don't waste your time.
- ...half the experts, at any given time, are likely to be wrong. Indeed, there is one [investment] letter which simply analyzes the sentiment of all the others—and advises you to do the opposite....
- Give up any idea of beating the market.

Hell, I don't know. Can't anyone here play this game? Admittedly, much of the contrary advice offered here is from Tobias, who seems to have a lot of common sense but deliberately plays the iconoclast. There are many contrar-

ians who agree with him, though. Any time you're thinking about buying stocks, you'll find bulls and bears and goldbugs and silverbugs and people who tell you to get out of precious metals. You can even find books of advice on how to make a killing in commodities, although amateurs almost always wish they hadn't tried. These two bits of advice come a few paragraphs apart in the same article in a prominent national publication: "Many investment pros suggest that investors pay close attention to the government's index of leading economic indicators [and other signals]... One excellent system is to go in a different direction from the investment herd." When a national magazine suggests, with a straight face, that you might try following the standard advice, but then again maybe you should do just the opposite, you know you're on dicey ground.

There is even a theory (held by some serious analysts and awfully appealing to frustrated investors and advisers) known as "the random walk." It holds that the market is completely unpredictable. Like the Shadow, the market *knows*. It immediately absorbs and adjusts to any new information before you hear about it. By this theory, information is useless; by the time you make your move, the market is already awaiting the next surprise, which you don't know about, because it hasn't happened yet. If the walk is random, technical analysis doesn't work; the market even takes into account expectations that the past will repeat itself. Fundamental analysis won't work either; if the market is governed by an unerring, all-knowing invisible hand, it's hard to see how there could be any such thing as an undervalued stock.

Bonds are also subject to large market fluctuations. Interest rates go up and bond prices go down, and vice versa. It's that simple. Bonds are interest-bearing investment, and the market adjusts the prices to make bonds of comparable risk pay the same rate. Suppose you buy a \$1,000 bond that pays 10%, and interest rates rise to 15%. Obviously, nobody will buy your 10% bond when he can buy a 15% bond for the same price. So the market bids down the price of your bond until it pays 15%, too. (In this case, you might get \$667 if the maturity was still distant. Prices tend to rise as bonds near maturity, because the buyer knows he will be able to recover the face value of the bond at that time, and market risk is reduced by the shorter span.) Unfortunately, interest rates are as difficult to predict as the stock market.

Anyway, there is ample evidence that professional money managers do not beat the market consistently, and some argue that they're not much better at picking stocks than a monkey throwing darts. In fact, Tobias reports, the editors of *Forbes* got to monkeying around in 1967 and selected thirty stocks by tossing darts at *The New York Times* stock pages. They invested a hypothetical \$1,000 in each. Fifteen years later, the portfolio had gained 239%, while Standard & Poor's 500 had risen only 35%. (Dart-throwing didn't turn out to be all that great, however. The appreciation comes to a little over 8% a year *before* inflation, and inflation was horrendous.) Also in 1967, a Maryland consulting company picked 100 portfolios of twenty-five stocks

selected at random by computer. Eighty-two outperformed the market over the next decade.

There are hundreds of mutual funds, which invest in a broad range of stocks, and each has a professional manager. Every month, *Money* magazine lists the best performers. In July 1984 (cover story: "Your Safest Investments Now"), the magazine reported, "The average equity fund is down 12.2 %. That's a lot worse than the 3.1 % decline in Standard & Poor's 500-stock index in the 12 months to June 1." Only five funds had gained more than 10% in the previous year. Four of the five largest mutual stock funds had losses for the year; the one "winner" sported a passbook savings-size gain of 5.4%. Meanwhile, you could have been earning close to 10% in a bank money market account at zero risk.

Because of all of these uncertainties, the comparison between the New York Stock Exchange and Caesar's Palace is inevitable. At Caesar's Palace, the house makes money by fixing the odds a few points in its favor. At your broker's, the house takes its money off the top in the form of commissions. Commission schedules are complicated, but your broker will take a higher percentage of your money for small transactions than large ones. At a full-service brokerage house, it might cost you as much as \$50 to get in and out of 100 shares of \$1 stock (50%), \$230 to get in and out of 300 shares of \$15 stock (5.1%) or \$190 to get in and out of 100 shares of \$75 stock (2.5%). Discount brokers, who do not offer advice, encouragement, or consolation, charge 35% to 80% less, but usually have a minimum fee of \$30 to \$40. By comparison, an *upfront* gambling house takes 5.3% in roulette, 10% to 25% on slot machines, 18% in paramutuel betting, and 23% in off-track betting. State lotteries pay out only 40 to 50% of their revenues in prizes; buying a ticket is more a contribution to a worthy cause than an honest wager.

A brokerage house's cut has two important implications for relatively small investors. First, you cannot afford to trade in very small lots. How could you possibly hope to recover from a 50% loss to brokerage fees? Second, you cannot afford to trade often enough to play short-term surges in the market. Even a 2.5% round-trip commission will eat 30% of your principal in a year if you churn your positions once a month. (Your broker and his firm will love it, though: two out of three ain't bad.)

Strategy

Before you plunge into this thicket, you ought at least to know what you're trying to do. It's tough enough to reach your goals if you know exactly what they are. If you don't know where you're going, you'll probably discover you can't get there from here.

Different investments offer different opportunities—and risks. Some things you need to consider:

- Is your objective long-term growth or current income? Naturally, you can't have it both ways. Bonds and other interest-bearing investments provide income. If you buy a high-interest bond and rates drop, you may

also realize a capital gain, but that is not the main idea. (Of course, if interest rates go up, the market value of your bonds will decrease.) Some stocks, on the other hand, offer the potential of long-term gains. Growth stocks may not pay much in dividends; in fact, they may not pay dividends at all. Stodgy stocks (like utilities) with high dividends are better suited for income investments.

- Risk. Can you sleep at night with your money in this investment? The market is supposed to reward risk, of course, but risk is risk: your investment might sour. You probably won't lose all your money unless you get into a real crap game, but you could easily lose 20% or 30% of your original investment. If you get into the market at the top of a steep slide, you could lose even more, if you don't get out in time or don't have the patience to await a recovery. (Recoveries have always come before; the question is, how long, oh Lord, how long?)

There is more than one kind of risk. There's business risk: you put your money in Acme Widgets, and the bottom falls out of the widget market. There's market risk: the stock market takes a plunge, taking Acme Widgets with it. There's interest risk: you put your money in Acme Widget bonds at 10%, and the going rate heads for 15, making you miserable with your 10% return and deflating the market value of your bonds, so you have to take a capital loss to get out. Stocks also usually take a beating when interest rates rise, but they may weather it better than bonds. There's inflation risk: your investment hangs on in dollar value, but fails to keep pace with inflation.

- Liquidity. You shouldn't invest money in stocks and bonds, if you're going to need it any time soon. They're liquid in the sense you can sell them (most of them anyway) at will. But, if you have to sell because you need the money, you may be forced to get out of the market at the worst possible time.
- Taxes. Dividends and interest are usually taxable as ordinary income, at your exorbitant marginal tax rate. Tax-exempt municipal bonds (and those of other tax-exempt entities) are free from federal income tax and from state taxes in the state where they are issued. The market knows this, of course, and adjusts rates accordingly. Still, tax-exempts are often a good deal if you're in an upper tax bracket. U.S. Savings Bonds and Treasury bonds, bills, and notes are exempt from state and local taxes. Federal tax on Savings Bonds is deferred until redemption. Any market gain, whether in stocks or bonds, is taxable as a capital gain, provided you hold the security for the minimum period, currently six months.

Risk aversion is a personal matter. Some people like to gamble; some don't; some get sucked in beyond all reason. Whatever your gambling urge, prudence demands attention to cycles, both in your own life and in the markets'.

Advisers vary somewhat as to the proportions they recommend, but generally they are agreed that young people should begin by building a sound base: a liquid cash reserve, a house, and secure investments. As the parents

reach their thirties and forties and family income grows, the balance shifts toward growth stocks and perhaps leveraged real estate. The need to build a college fund for the children may incline you toward more conservative investments, however. Risk-taking should then decline, as the couple approaches retirement and shifts its emphasis toward income-producing investments.

Here is one recommended portfolio pattern. Young couple, no children: 50% stocks, 25% real estate, 20% bonds, 5% precious metals as an inflation hedge. Mid-life, building a college fund: 60% stocks and real estate, 40% bonds that mature about the time the youngsters reach retirement age. At retirement: 50% stocks and real estate, 50% bonds and money market funds. This is offered only as an example. Adapt it to your own needs.

(Precious metals, incidentally, are a very risky business. They do provide a hedge against inflation, if you buy at the right price. Naturally, prices tend to be most attractive when the need for an inflation hedge is least—when prices and the economy are stable. Even so, prices are notoriously flaky and subject to wild swings, as was the case in the Hunt brothers' notorious silver gambit.)

The economy doesn't just sit there waiting for you to figure out what you're going to do, obviously. Business has its own cycle.

At the bottom, in recession, interest rates and unemployment are high. The stock and bond markets are low and sluggish. This is where you want to get into the stock and bond markets. When recovery comes, your stocks, if they're carefully chosen, should ride the surge. As interest rates fall, the bond market also warms. If you buy bonds at the bottom, your high yield will be locked in, and the market value of your securities will be bid up to match the current, lower yields. Then the economy overheats. Interest rates begin to rise again; the stock market falters at a high level, perhaps waffling along for an extended period. This is the period of highest risk and least opportunity. Stocks are at or near their peaks, and the long-term prospects are for heavy losses. You'll want to be in money market funds and other liquid, short-term investments.

Great. Buy low; sell high; get rich.

All you've got to do is figure out where we are in the cycle, along with everybody else, from professional money managers to the greenhorn who's read one magazine article.

Broad ten- and twenty-year sweeps are not primarily what you're interested in for timing purchases and sales. Along the way from 578 in 1974 to 1200 in 1982, the stock market, in round numbers, peaked at 1000, dipped to around 750, climbed to 900, dipped back to 750, went up to 1000, dropped to 775, then made its surge. Suppose you caught the peaks and valleys exactly. Your money would have quadrupled, rather than doubled, before taking dividends into consideration.

Of course, no one hits the peaks and valleys exactly. However, you can win if you can get even the gist of the market's direction. One study, by the late Charles J. Rolo, found that your earnings would be three times the market

average from 1960 to 1981 if you had caught 70% of the rises and avoided 70% of the declines.

Even that is no easy task. The prevailing view is that small investors make less than the market average when the market gains and lose more when it declines. There are all kinds of theories about how to predict market swings. They are often contradictory, and it would be futile to try to resolve the issue here.

As I write this in early August, 1984, the New York Stock Exchange has just had its first 200-million share day, and the Dow has closed above 1200 for the first time in six months. The front page of *Barron's* asks, "Is This A New Bull Market?" The lead story in *The New York Times*' Sunday Week in Review section is "Vital Signs/The Economy Cheers Reagan And Challenges The Democrats." Institutional investors have led the way, and the small traders are now expected to join the fray.

By the time you read this, you will know what happened—if you were paying attention, and if it turns out to be much of anything. But I don't know what's going to happen, so it's a fair example of what a fevered market looks like to an investor.

The prevailing (but by no means unanimous) views seem to be 1) the market is likely to rise until the November election and 2) this week's feverish activity came about because a one-month decline in the government's leading economic indicators stanching fears that the economy was overheating.

A friend reports that his broker just called advising him to transfer all of the money in his money market fund to the mutual stock fund of the same company. The same broker, he says, advised him to go into stocks a couple of years ago, when the Dow was under 800. He finally wandered over several months later, at 1160. (Hell of a strategy; indecision is no doubt one reason small investors tend to fare poorly.)

I'm not saying the broker is offering bad advice. There may be a few bucks to be made by getting into stocks right now, and the risk of switching to the stock mutual fund probably isn't too great, if you pay attention and are prepared to get back out if things start coming apart. *Maybe* the market is headed for unprecedented heights. If you're an active trader, the news of the decline in indicators might have signalled a good time to move. It may not be too late now (as of this writing, obviously, not as of when you read this).

But consider exactly what the bulls are saying. The market is up about 100 points, and some are predicting that the market will peak somewhere around 1260, which means that, from here on out, you'd make about 5% before commissions and taxes, if your stocks matched the average.

Where you really want to be is sitting on a pile of stocks you bought when the Dow was under 800, trying to pick the most opportune moment to take your 50% profit. (That's if you didn't get out back in February, the last time the average passed 1200, which would have been O.K., too.) Don't insist on milking every dollar out of your investments. Accept your handsome

gains, and don't worry about missing out on a few dollars.

Sure, that's hindsight. It would have been hard to spot the bottom of the market. But the market has been to 1200, and, if stocks are trading 400 points lower, the market almost has to go back up eventually unless the economy just comes apart at the seams. If you buy at 800, so what if the market drops to 700 for a while before recovering? You might even buy more stock. The market is now less than 100 points from its all-time high, and some analysts are expecting a decline after the election. Now, *that* might be a good time to get into the market, if the decline is bad enough. You probably would want to wait, though. The market has tended to bottom out about eighteen months after elections.

Moreover, it appears to the casual observer that all of this gushy confidence is in fact pretty shaky. There is an editorial in *The New York Times* (in the same section as the "Vital Signs" story) called "Misleading Indicators." It points out, among other things, that a one-month downturn doesn't mean anything and that the recessions the leading indicators are supposed to predict have trailed by anywhere from three months to nearly two years. On the front of the Business section, the *Times* is speculating over the rise of protectionism as a result of the strong dollar. Which means, I guess, that if you really get into this stuff, you may actually end up worrying about the price of tea in China. In *Barron's*, the ads peddling investment advice are blaring: Prepare for Doom, Prepare for the Boom.

To quote from "Up & Down Wall Street," the page-one column in this week's *Barron's*: "What sent stocks rocketing skyward? As Floyd Norris relates in this week's Trader column, there are explanations aplenty. The most favored include subsiding fears of an overheated economy, the prospect of some give in interest rates, and the fact that institutions were loaded with cash. Well, the real explanation, as we understand it, also concerns loaded institutions. Two managers of vast pools of capital staggered back Thursday afternoon from a three-martini lunch (they were celebrating the repeal of Jimmy Carter). On parting, they mumbled 'bye' to each other. The ordinary expression of leave-taking was absorbed amid the fumes as 'buy.' Both did, promptly starting a chain reaction among their peers (even among those abstemious types who limit their midday imbibing to two martinis)."

As I say, I don't know. Sounds like as good an explanation as any.

If you play conservatively, exercise a little patience, and hold fear and greed in check, you may be able to avoid trading at the absolutely worst times. You probably won't beat the market, but you may come out ahead.

A few rules most advisers agree on:

- Invest, don't speculate.
- Don't invest money you can't afford to lose. Also, don't invest money you may need on short notice. This doesn't mean you won't mind if you lose it, just that you'll still be able to pay the mortgage and keep the roof from leaking.
- Diversify. This means at least six to ten stocks, in different industries,

bought at different times. (The later proviso will keep you diversified with respect to the market as a whole.) It also means not to put all of your money into the stock market. Look at bonds, real estate, money market funds, and perhaps precious metals. Rule of thumb: put no more than 10% of your investment fund into one company or more than 20% in one industry.

- Don't buy "odd" lots. Brokerage fees get out of hand for lots of under 100 shares. This means you're going to need a fairly substantial war chest to get into six to ten issues—even at a modest \$25 per share, it will take \$15,000 to buy 100 shares each of six stocks.
- Consider starting out with a mutual fund. This will get you into the market with diversification—and with professional management, for what it's worth—for as little as \$1,000.

A Sure Thing, Sort Of

Even with roulette, there's a sure-fire way to win. Bet on red or black. If you lose, double your bet. If you lose again, double it again. You won't win much, but eventually you will win the amount of your original bet, provided the house doesn't kick you out, and you don't run out of chips before your color comes up. (Warning: don't try this stunt yourself, kids. Casinos have limits on the range of bets at a table. All it takes is one streak of bad luck to run you up against the limit, at which point you have no way to recoup your accumulated losses.)

There's a similar tactic for the stock market. It's called dollar cost averaging. You invest the same amount in the same securities or mutual fund every year (or month), without regard to price. If you are investing \$5,000 a year and your fund sells for \$50 a share, you buy 100 shares. If the price rises to \$100, you buy only fifty. The result is that you buy most of your stock when prices are low, and less when prices are up. Your average cost will be lower than if you bought the same number of shares every year.

Let's suppose you invest \$5,000 a year in a hypothetical fund that starts at \$50 a share, rises to \$90, returns to \$50, falls to \$10, and returns to \$50. (Obviously, no real fund is so orderly, and this one's radical price swings make dollar cost averaging more profitable than it would be for a more stable investment.) These would be your transactions.

Price	Shares	Investment
\$50	100	\$5,000
\$90	56	5,000
\$50	100	5,000
\$10	500	5,000
\$50	100	5,000
	856	25,000

Now, your fund winds up right where it started out, and the price fell as often as it rose. But do you wind up with only the \$25,000 you invested? Nope.

\$42,800. All that's really happened, of course, is that the 500 shares you bought cheap are now worth a lot. Nothing magic about it: besides, dollar cost averaging is not foolproof. When you bought those cheap, \$10 shares, the 256 shares you had already bought for \$15,000 were worth only \$2,560. It takes guts to buy 500 shares of a fund in which you've already lost nearly \$12,500 on paper. At that point, there would have been no guarantee that the price would recover. Dollar cost averaging is only half the buy-low-sell-high formula. You'd have been better off, of course, if you had sold at \$90 instead of buying, and you haven't made anything on the shares you bought at \$50.

Stocks: Why Does Anybody Play This Game?

Common stockholders are the owners of a company. This doesn't mean the chairman is apt to take your phone call. But it does mean that you own a share of the company's profits. You get some of them as dividends; the rest are reinvested by the company (retained earnings). Debts and expenses have to be paid before you get anything, but, if the company should be liquidated, you would get a share of the proceeds, assuming a positive net worth.

Stocks are reasonably liquid investments, since you can get your money out at will. You should not, however, invest in stocks with money you might need to replace the half-broken-down, eight-year-old Ford when it finally goes. To do so would be to turn your decision when to sell over to the car.

Stocks also offer nice tax advantages if you get lucky. Dividends count as ordinary income, taxed at your marginal tax rate, after the dividend exclusion (\$200 for couples; \$100 for singles). But, if you hold your stocks long enough (only six months under the 1984 tax law), your profits when you sell will be taxed as capital gains, at 40% of your marginal tax rate. On the other hand, you get doubly burned if you lose; long-term losses are only 50% deductible, and then only up to \$3,000 per year. See Chapter 7.

To keep track of your stocks, all you need is your daily newspaper. A typical stock listing (in this case, in *The New York Times*) looks like this:

12-Month			Yld		P/E	Sales				Net
High	Low	Stock	Div	%	Ratio	hds.	High	Low	Last	Chg.
134¼	99	IBM	4.40	3.7	12	23013	120½	118	120	+1½

The first two figures show that IBM stock has ranged from \$134.25 to \$99 over the last year. IBM paid dividends of \$4.40 for the year, a yield of 3.7% at the current price. The P/E (price/earnings) Ratio tells you that the current price is twelve times *last* year's earnings. On this day, 2,301,300 shares were traded at prices ranging from \$118 to \$120.125 (120½). IBM closed at \$120, up \$1.125 from the previous day.

IBM has a relatively high price/earnings ratio. This means that investors have already bid up the price of the stock and tends to mean there is less opportunity for gain than with companies with lower P/E Ratios. Anything over 10 is considered high.

Institutional investors often bid up the P/E ratio of big companies like IBM. The big traders tend to stay away from smaller companies. That may be partly herd mentality, but it's also because trading on an institutional scale would disrupt prices of smaller issues. During the 1970s, institutional favorites rose by an average of 10.4% per year, compared with 20.8% for stocks with no institutional ownership.

IBM's 3.7% yield is moderate. Companies with dividends of 6% or more are considered income investments.

Book value is another important measure of stock. Book value is the net worth of the company's assets divided by the number of outstanding common shares. If a stock is selling below book value, theoretically you would come out ahead, even if the company bellied up and its assets were liquidated. On the other hand, a stock selling well above book may be inflated. You're looking for stocks in healthy companies with modest prices relative to their book values, although selling below book obviously can be a sign of trouble.

Many advisers recommend that you place a stop-loss order when you buy stock. This directs your broker to sell automatically if the price falls by a certain amount, say 10% or 20%. You might also set a high point at which you will sell, say a 50% increase in price. A dramatic increase in a stock's P/E ratio is another reason to consider selling. This means the price has bid up, and the stock may no longer be as good a value as it was when you bought it.

Amateurs should stay away from options, buying on margin, and selling short, which are excellent ways to lose your shirt. You can lose more than you invest. Options are sold in 100-share lots. A call option gives you the right to buy a stock at a certain price any time before a given date. A put option gives you the right to sell. Buying on margin is borrowing money from your broker to buy stocks. It works just like real estate leverage: if you win, you may win big, but you can lose more than you invested in the first place. Shorting is a bearish maneuver in which you sell stock borrowed from your broker in the expectation the price will drop. If it goes up, you have to replace the stock at the higher price, taking a loss in addition to the interest and commissions you pay your broker.

The least risky type of option is known as a covered call. You sell someone else an option to buy a stock you own for more than the current price. The worst that can happen is that your stock will go up by more than you expect, and you will lose some of your gain. You may be able to make \$2 or \$3 a share with a covered call that doesn't get called.

The government, incidentally, wants you to buy stocks in strapped electric utilities. If you reinvest your dividends in new stock, you do not pay taxes until you sell your shares, and then you pay only capital gains tax. The maximum shelter is \$750 for singles and \$1,500 for couples filing jointly. If you buy the shares directly from the utility, it may throw in a 5% discount, and you don't pay brokerage fees. A good deal. The law expires in 1986, but it is likely to be renewed.

Two other investment instruments related to stocks are worth a mention. Preferred stock is an income investment. It pays a fixed return, just like a bond, except that the principal never comes due. The only thing preferred about it is that the dividends must be paid before any dividends are paid to common shareholders. Convertible bonds are a relatively safe way to play the stock market. They can be exchanged for common stock if it climbs to a certain price, typically 15% to 30% above the price when the convertibles are issued. Convertible bonds offer more chance for gains than other bonds and less risk than common stock. Interest is fixed for the life of the bonds and is usually higher than that of preferred stock, but lower than interest on ordinary bonds.

Stocks are sold on The New York Stock Exchange, the American Exchange, seven other domestic exchanges, and numerous foreign exchanges. In addition, some stocks are sold "over the counter" through a computerized network of brokers.

You must buy stock through a broker, unless you can afford a \$400,000 seat on the New York Stock Exchange. A full-service broker offers advice, hand-holding, and the wisdom of his firm's research department. Some people think brokerage house research is next to useless because, by the time you get it, thousands of others have the same information. Discount brokers offer the same transaction services without the advice and hand-holding. Their commissions are 40% to 80% below full-service commissions. You may want to use both. Many banks also offer discount brokerage services.

If you decide to pick your own stocks, the standard references are the monthly *Standard & Poor's Stock Guide* (\$75 a year) and the weekly *Value Line Investment Survey* (\$365 a year). Both are available at your broker or public library.

Mutual Funds

Mutual stock funds are an excellent way to get into the stock market with professional management, a minimum of risk, and far greater diversification than you could achieve on your own. All for an investment of \$1,000. Some mutual funds have averaged a 20% return over the years.

Not all mutual funds are the same, of course. You have to pick one with a strategy that meets your investment needs and a manager that can carry it off. This is not always easy to do. Aggressive funds, which do best in bull markets, tend to take the worst beating in the season of the bear. Conservative funds, on the other hand, don't fare so well when the market is rising, but may not take as much of a flogging when the going gets tough. One reason for this is that fund managers tend to stick with the same strategy without regard to the business cycle. Still, both types of funds are so thoroughly diversified that you do not run as much risk of traumatic loss as you might if you pick a few stocks yourself. There's no great harm done if one of a fund's stocks heads for the basement. However, you might want to diversify your fund holdings or,

better yet, select a family of funds that lets you transfer money from one fund to another with a phone call.

When you invest in a mutual fund, the manager pools your money with that of other investors. You may receive dividend distributions, garnered from the fund's portfolio. These are taxable as ordinary income, whether you take the money or reinvest it in the fund. You may also receive capital gains distributions from the fund's profitable sales. These are usually distributed annually and are taxable as capital gains, regardless of when you bought your shares in the mutual fund.

Mutual funds vary in structure and strategy:

- **No-load vs. Load.** Some funds charge a sales commission, typically 8.5%. These are called load funds. No-load funds do not charge a sales fee. Both types of funds charge an annual management fee, usually 0.5 to 1% of your investment. There is no evidence that load funds do any better than no-load funds. Sometimes, but not always, funds offered through brokers are load funds, while those you purchase by mail tend to be no-load. Shop around for a no-load fund that meets your investment goals.
- **Income funds.** These invest in high-dividend stocks and sometimes bonds and preferred stock. Their goal is to generate current income, which will be taxable at regular rates. These funds are very sensitive to interest rates but weather other market fluctuations well, because they invest in stable, high-yield stocks, such as utilities.
- **Growth funds.** Growth funds play the market for maximum capital gains. They're terrific in bull markets, poor in bear markets.
- **Balanced or mixed funds.** These funds buy stocks both for current income and for long-term gains. In bull markets, they tend to appreciate less than growth funds but more than income funds. On the other hand, they're more stable than growth funds when the market declines.
- **Index funds.** These are for the followers of the random-walk theory—that there's no way to predict what stocks will do. They buy all major issues and hang on. The result is that they do exactly as well—or poorly—as the stock market as a whole.
- **Tax-managed funds.** Tax-managed mutual funds are a nice twist for high-tax-bracket investors. Rather than distributing earnings to shareholders, all dividends and gains are reinvested. You pay taxes only when you cash in your shares—and then at favorable capital gains rates.
- **Special funds.** These invest in particular industries. They are thus riskier than broader-based funds. You should consider diversifying your mutual fund holdings if you buy into a special fund.
- **Open-End vs. Closed-End.** With an open-end fund, there is no limit to the number of investors. You can buy more shares from the fund at any time; the fund will also redeem shares at market value. A closed-end fund sells a limited number of shares, which are then traded on the stock

exchanges like any other stock. There at least two disadvantages to closed-end funds: you may not be able to sell your shares at their underlying value on a moment's notice, and you have to pay regular brokerage commissions when you trade shares. On the other hand, closed-end funds are sometimes thought to be more independent and willing to buck trends than open-end funds. Closed-end funds do not have to worry about disgruntled shareholders yanking out their cash at the first sign of trouble. You also may be able to purchase closed-end shares at a price below the value of its underlying portfolio. Closed-end funds are listed in Sunday newspapers.

Buy Bonds?

When you buy a bond, you are simply making a fixed-interest loan to the issuer, be it a major corporation, a local government, or the U.S. Treasury. Local government bonds are exempt from federal taxes and usually from taxes in the state where they are issued. Treasury issues and some other government obligations are exempt from state and local taxes.

Bonds were once a safe, stodgy investment. Now the picture is tumultuous.

The most publicized recent bond horror story was the aptly yclept WHOOPS debacle. The Washington Public Power Supply System defaulted in 1983 on \$2.25 billion worth of bonds supposedly backed by the taxing power of the state. WHOOPS got an A rating from Standard & Poor's until less than two years before disaster struck.

Such occurrences are extremely rare, however. For bonds with top safety ratings from Standard & Poor's and Moody's, the risk of default is minimal. But fluctuations in interest rates can take you to the cleaners—or give you a nice gain.

In the early sixties, corporate bonds were paying 4% to 5% interest, which seemed handsome at the time. Corporate bonds have maturities of up to forty years, so many of those old 4 and 5 percenters are still outstanding, and that interest rate looks pretty grim by today's standards.

If you bought a 4% or 5% \$1,000 General Motors bond maturing in 1995, there would still be little cause for concern that the company would pay up when the bond came due. If you sold the bond now, however, you could not get back the \$1,000 you paid for it. No one will pay \$1,000 for a return of \$40 or \$50 a year when a 12% bond sells for \$1,000 and pays \$120. The bond market adjusts prices to accommodate interest rates. Your 5% GM of 1995 might sell for only \$550, so that the buyer would get an immediate return of a little over 9%, plus a guarantee of \$1,000 in 1995, bringing his total yield to more than 12.5%. As the holder of that bond, you're stuck with a choice between low interest and a capital loss. To a buyer, however, that bond might be attractive.

On the other hand, you might have bought a sound utilities bond paying 18% interest back in the Carter inflation. By now, you would be sitting on a handsome return and a paper gain of 30% to 40%.

Obviously, the best time to buy bonds is when interest rates have gone through the roof. If you keep them, the high rate is locked in; if you sell, you may realize a handsome gain. Of course, it's hard to spot interest peaks. Still, it would be difficult to sustain economic life as we know it with 18% interest for extended periods. If interest rates returned to that level, bonds would look pretty attractive.

Speculating in bonds is difficult, however. If you sell in small lots, and anything less than \$100,000 is a small lot, the broker will hit you for 5% coming and going. Bonds are also less actively traded than stocks. You might have to give another 2% to 3% discount to find a ready buyer. In addition, many bonds are "callable," which means that the issuer can redeem them at face value. This cuts off your top-end prospects for gains, while leaving you fully exposed if interest rates rise. Nobody calls bonds that are paying less interest than the current rate.

Borrowers need to be able to sell bonds, however, so they have devised some attractive variations. One is a put bond. It allows you to redeem your bond at face value at specified dates. Some bonds may be cashed in only on one or two specified dates. Others are redeemable on a certain day each year, after they've been in circulation for five years. Some companies and local governments issue floating rate bonds, with interest rising and falling with the financial tides. In addition, some local governments now WHOOPS-proof their bonds by buying insurance guaranteeing payment of principal and interest. You still lose, however, if you have to sell at a discount before maturity. Put, floating-rate, and insured bonds pay lower interest than regular bonds, because they expose you to less risk. Convertible bonds, as mentioned earlier, are convertible to common stock, if prices rise to a certain level. That, however, is most likely to happen after a decline in interest rates, which would favor bond holders.

Buying low-yield bonds at a discount when interest rates are high is one way to avoid most of the risks of bonds. The original owner of the GM of 1995 mentioned earlier pays the penalty for buying when rates were low. As a buyer, you pay \$550 for a \$1,000 bond. GM is not going to call that bond, because it would have to issue another at higher interest to replace it. It would be fine with you, of course, if for some reason the company did call the bond: You would receive \$1,000 for a security that cost you \$550. Meanwhile, the value of your bond would climb steadily as the due date approached.

Bond funds are another way to hedge your bets. They come in two varieties: bond funds and unit trusts.

Bond funds are structured much like stock mutual funds. They maximize yield by buying long-term securities when rates are high. A fund's value rises and falls with interest rates, and, since the shares never mature, there is no guarantee of recovering your principal. Unit trusts are similar, except that the portfolio is fixed when the trust is formed, and bonds are sold only if there is risk of default. Sometimes a flexible fund outperforms a fixed portfolio, and sometimes not. There is usually a 4% or 5% sales commission on unit trusts,

so they are best suited for long-term investments. For shorter periods, choose a bond fund.

All bonds are essentially similar, whether they're issued by the federal government, a local government, or a corporation. Each type, however, has advantages and disadvantages. Let's look at the various types.

Bonds for Business

Businesses issue bonds, because a well-structured company needs a balance of equity capital and debt. Common shareholders expect a higher return than lenders, because they assume a higher risk. Too high a proportion of debt, however, leverages a company, just like buying stock on margin. With too much leverage, a company would be unstable, and modest swings in earnings have radical effects on its stock. Some types of bonds are worthy of comment:

- **Corporate bonds.** These pay slightly higher rates than government issues of similar maturity. Usually in \$5,000 denominations with maturities of ten to forty years. From your broker.
- **Zero Coupon Bonds.** This is where you give the issuer \$53.54 (at 10% interest), and the issuer gives you \$1,000 in thirty years. Of course, \$53.54 left in an Individual Retirement Account for thirty years at 10% interest would produce exactly the same result. It's just plain old compound interest. But zeros allow you to lock in interest rates for the duration. The drawback (except for bonds issued by tax-exempt agencies) is that you have to pay ordinary income tax on the interest as it accrues, even though you don't receive it until you cash in your bonds. Thus, taxable zeros are excellent for IRAs and Keoghs. Tax-exempt zeros are often callable; the issuing agency can buy them back at below face value if interest rates drop.

There are four types of zero, and all yield slightly less than comparable ordinary bonds. A few are issued by companies. Zeros also come in packages based on Treasury securities, bank certificates of deposit, and tax-exempt bonds. Treasury zeros are made up by brokerage houses. They bundle the coupons from federal securities and sell them to investors, each of whom gets \$1,000 at a specified date. Merrill Lynch calls its Treasuries "Tigers," for "Treasury Investment Growth Receipts." Zero coupon CDs are issued by banks and sold by brokers. They're insured by the Federal Deposit Insurance Corporation, just like any other bank deposit. Tax-exempts are issued by the same sorts of agencies that issue other tax-exempt bonds.

- **Bond Funds and Unit Trusts.** These offer diversification, relative safety, and liquidity.

Tax-Exempt Bonds

Tax-exempts can be an excellent investment for people whose tax bracket is over 30%; the higher your tax bracket, the more appealing tax-exempts

become. In early August 1984, while the stock market was surging, tax-exempt bonds were yielding an average of 9.92%, while many blue chip corporate bonds were trading at yields of 11% or 12%. The beauty of tax-exempt bonds, obviously, is that they're exempt from federal income taxes and usually from state and local taxes in the state of issue.

If you're in the 50% tax bracket, tax exemption obviously doubles your yield, compared with a taxable return. A 10% tax-exempt return is as good as a 20% taxable return. For other tax brackets, the formula is only slightly more complicated:

$$\frac{\text{Tax-exempt Yield}}{(1 - \text{Your Tax Bracket})} = \text{Equivalent Taxable Yield}$$

Thus, if your tax bracket is 40%, and you receive 10% tax-free interest, the calculation goes like this:

$$\frac{10}{(1 - .40)} = \frac{10}{.60} = 16.67$$

Figure 9-1 will save you from doing the math.

Equivalent Taxable Yields For Tax-Exempt Bonds

Tax-Exempt Yield	Tax Bracket						
	30%	33%	38%	42%	45%	48%	50%
5%	7.1%	7.5%	8.1%	8.6%	9.1%	9.6%	10.0%
6%	8.6%	9.0%	9.7%	10.3%	10.9%	11.5%	12.0%
7%	10.0%	10.4%	11.3%	12.1%	12.7%	13.5%	14.0%
8%	11.4%	11.9%	12.9%	13.8%	14.5%	15.4%	16.0%
9%	12.9%	13.4%	14.5%	15.5%	16.4%	17.3%	18.0%
10%	14.3%	14.9%	16.1%	17.2%	18.2%	19.2%	20.0%
11%	15.7%	16.4%	17.7%	19.0%	20.0%	21.2%	22.0%
12%	17.1%	17.9%	19.4%	20.7%	21.8%	23.1%	24.0%

Figure 9-1. Equivalent taxable yields for tax-exempt bonds.

Tax-exempt bonds are sometimes called municipals, because they're often issued by cities and towns. They can also be issued by counties, fire districts, water and sewer authorities, turnpike authorities, and other local government agencies.

WHOOPS notwithstanding, tax-exempts are usually quite safe. They're usually backed by the taxing power of the issuing entity or by the revenues of a public works project, although local governments can issue tax-exempt revenue bonds for all sorts of purposes, including promoting economic growth by financing new industries. If you're willing to give up a tad of interest, some issues are insured for payment of principal and interest.

The underlying safety of the munis, however, does not protect you against market risks. If interest rates go up, the value of your bonds will decline, just like any other bond. In addition, tax-exempts can be tough to sell in a pinch. Where exactly is the market for a slightly used East Overshoe Bird Sanctuary 8% of 2008? Look for at least A ratings from Standard & Poor's and Moody's; it's also safer to stick to the better known tax-exempts.

Bond funds and unit trusts provide the safety of diversification and go a long way toward solving the liquidity problem. Some unit trusts specialize in bonds issued in a particular state (usually the larger ones with higher tax rates), giving residents of those states the added benefit of freedom from the state tax collector as well as the IRS.

U.S. Government Bonds

Uncle Sam is the biggest borrower in the world. He's also the most secure; naturally, that security usually comes at the price of slightly reduced interest rates. Government securities come in a variety of forms:

- **U.S. Treasury Bonds.** Default-proof and easily sold, but subject to the ravages of interest fluctuations. They are sold in denominations of \$1,000 with maturities of five to twenty years. Yields are usually about 1 point below top quality corporate bonds of comparable maturity. As with Treasury bills and notes, interest is exempt from state and local taxes.

Treasury bonds, notes, and bills are available at small commissions from many banks and all brokers. New issues are available, with no service charge, from the twelve district offices and fifteen regional offices of the Federal Reserve Bank. Bond prices are listed in Sunday newspapers. The bid price is what dealers offer to pay; the ask price is what they will sell for. Numbers to the left of the decimal are multiplied by ten, those to the right of the decimal are thirty-seconds of ten dollars. Weird. Anyway, if, for example, the bid is 79.5, the buyer proposes to pay \$791.56 ($79 \times 10 + 5/32 \times 10$). If the ask price is 80.1, he proposes to sell for \$800.31.

- **Treasury Notes.** Similar to Treasury bonds, but with maturities of one to ten years. The minimum investment is \$5,000 for maturities of less than four years, \$1,000 for longer-term notes. Bought and sold the same way as bonds.
- **Treasury Bills.** These are usually considered short-term cash investments, rather than long-term investments. Maturities are thirteen, twenty-six, and fifty-two weeks. The minimum investment is \$10,000.
- **Government Agency Bonds.** These pay about a point more than T-bonds and are just as safe, but trading is thinner, making them more difficult to sell. They're issued by such agencies as the Federal Land Bank, the Federal Home Loan Bank, the Bank of Cooperatives, and the Federal Intermediate Credit Bank.
- **Ginnie Maes.** The Government National Mortgage Association buys up government-insured mortgages from banks and savings and loans, adds a federal guarantee for payment of principal and interest, and sells them in big chunks to brokerage houses. The brokers divide them into \$25,000 denominations, mark up the price, and sell to investors. You can also make smaller investments, usually with a \$1,000 minimum, through bond funds. Ginnie Maes are as safe as Treasury bills and pay slightly higher interest. You receive monthly payments of principal and interest just as if

you were a mortgage lender. There is a strong market for Ginnie Maes. They are quoted at a discount: a price of 75, for example, would be 75% of \$25,000.

- U.S. Government Savings Bonds. Boring as a 5.5% passbook savings account, right? No longer. Series EE bonds, in \$25 denominations, pay interest at a floating rate based on 85% of the average yield of five-year Treasury notes over a five-year period, with a minimum of 7.5%. Savings bonds have several advantages. They are redeemable at full face value, plus accrued interest, any time between the fifth and tenth year. Thus, market risk is virtually eliminated. You cannot redeem a savings bond for the first six months, however, and, if you cash in a bond in the second six months, you receive only 5.5% interest. The rate gradually increases until you've held the bond for five years. Savings bonds are a reasonable means of preserving capital, provided you will not need the funds for five years.

Managing Investments With *The Home Accountant*

The Home Accountant is a general purpose accounting program. It is not specifically designed to manage investments, but it will allow you to keep track of your gains and losses and provide the data you need to analyze your investments.

If you make only a few investments in stocks and bonds and plan to hold on to them indefinitely, you can simply keep track of your progress in your regular budget. If you bought 100 shares of IBM, for example, you would set up an asset account for them, and an income account in which to record dividends.

If you're a more active trader, you might want to set up a separate data disk for your portfolio, so your investment transactions won't become ensnared with your grocery budget. If you have an asset management account with a broker, it will be the centerpiece of your portfolio; all of your investment transactions, dividends, and interest will flow through it. Set it up as a checkbook account.

Suppose the Lassiters decided to get into the stock market in July 1983, with the inevitable lousy timing of amateur investors. (They're about to violate all the advice you've just read. Pay no attention. The focus here is on *The Home Accountant*, not investment strategy.)

The Lassiters take \$25,000 down to their broker on July 1 and buy 100 shares of common stock in each of three companies: Apple Computer, IBM, and Gannett. (The latter is a big mistake, it turns out. Maybe Susan just likes newspapers.) They also decide to sell their shares of XYZ Mutual Fund and leave the proceeds in the asset management account, which is also a money market fund.

When they get home, they start a new *Home Accountant* data disk with these budget categories: ASSET MANAGEMENT ACCT. (CHECKBOOK #1); APPLE COMPUTER, IBM, and GANNETT (all asset accounts); APPLE DIVI-

DENDS, IBM DIVIDENDS, GANNETT DIVIDENDS, and INTEREST (all income accounts); and COMMISSIONS (an expense account). They have set up separate dividend accounts for each stock, so they will be able to assess their earnings (or, as it turns out, losses) for each.

Figures 9-2 and 9-3 are their *Home Accountant* Check and Deposit Activity Reports after their busy day at the broker's. They have bought 100 shares of Apple at 48¾, plus \$87 in commissions, 100 shares of Gannett at 69, plus \$91 in commissions, and 100 shares of IBM at 121, plus \$112 in commissions. Each purchase is recorded as a split transaction, to distinguish between the price of the stock and the commission expense. The bill comes to \$24,165. A pretty heady day's spending to wind up with only three stocks.

CHECKBOOK TRANSACTIONS CHECK ACTIVITY REPORT FOR ASSET MANAGEMENT ACCT. 0, 1980						
TRAN DATE	ITEM # NAME	AMOUNT	COMMENT	CATEGORY	TAX CLR	PTD
6 07/01/83	1 BROKER	4962.00	100 APPLE @ 48 3/4	SPLIT	N ?	N
7 07/01/83	1 BROKER	*4875.00	SPLIT	APPLE COMPUTER	N Y	N
8 07/01/83	1 BROKER	*87.00	SPLIT	COMMISSIONS	N Y	N
9 07/01/83	2 BROKER	6991.00	100 GANNETT @ 69	SPLIT	N ?	N
10 07/01/83	2 BROKER	*6900.00	SPLIT	GANNETT	N Y	N
11 07/01/83	2 BROKER	*91.00	SPLIT	COMMISSIONS	N Y	N
12 07/01/83	3 BROKER	12212.00	100 IBM @ 121	SPLIT	N ?	N
13 07/01/83	3 BROKER	*12100.00	SPLIT	IBM	N Y	N
14 07/01/83	3 BROKER	*112.00	SPLIT	COMMISSIONS	N Y	N
17 07/02/83	4	0.00		NO CATEGORY	N ?	N
		TOTAL	24165.00			
*AMOUNT IS NOT PART OF TOTAL						

Figure 9-2. The Lassiters' *Home Accountant* Check Activity Report shows that they have spent \$24,165 on stock in a single day. Each purchase is recorded as a split transaction, to distinguish between the market value of the stock and commissions.

CHECKBOOK TRANSACTIONS DEPOSIT ACTIVITY REPORT FOR ASSET MANAGEMENT ACCT. JUL 2, 1983						
TRAN DATE	ITEM # NAME	AMOUNT	COMMENT	CATEGORY	TAX CLR	PTD
15 07/01/83	1 XYZ SALE	13234.00	100 XYZ @ 133.5	INTEREST	N ?	N
16 07/31/83	2 INTEREST	110.32			N ?	N
		TOTAL	13344.32			

Figure 9-3. The Lassiters' Deposit Activity Report reflects the sale of their XYZ mutual fund shares, as well as \$110.32 in interest for the first month after they open their asset management account. They have recorded the fund sale under "no category," because there's no need to create an extra budget category.

The Deposit Activity Report shows the sale of their XYZ shares and their first month's interest on their asset management account.

When the Lassiters' business is finished on the first (before the interest is deposited in their account), they have \$14,179 in their asset management

account. The Apple stock is worth \$4,875, the IBM \$12,100, and the Gannett \$6,900. They add the \$290 they paid in commissions to the budgeted balance in their asset management account, since they will have to make up that expense before they make any money. They enter these amounts as their budgeted figures for each month. They are the base-line against which the Lassiters will measure their progress. Each month, the Lassiters will adjust the actual value of their stock on the budget screen to reflect price fluctuations. (They will use the closing price on the first trading day of each month. You could use another, if it seems more relevant. You can adjust actual balances in an asset account for a given month as soon as you start the new month, but not before.) *The Home Accountant* will automatically calculate their gain or loss for the year to date.

The Lassiters make no more transactions for the year. (We're keeping the illustration simple.) It turns out to be a lousy year for the stock market, and for the Lassiters' stocks in particular. In June, a year later, their budget screen for Gannett looks like Figure 9-4. Oh, to have sold in December.

```

** HOME ACCOUNTANT EXPANDED **
EDIT CHECKBOOK BUDGET CATEGORIES
CATEGORY# 7
A TYPE 1 (ASSET)
B TITLE GANNETT

```

	BEG	ACTUAL	DIFFERENCE
	BUDGET C	6900	
D JUL	6900	6900.00	0
E AUG	6900	6575.00	325-
F SEP	6900	6025.00	875-
G OCT	6900	5812.50	1087-
H NOV	6900	5900.00	1000-
I DEC	6900	6250.00	650-
J JAN	6900	5750.00	1150-
K FEB	6900	3800.00	3100-
L MAR	6900	3450.00	3450-
M APR	6900	3337.50	3562-
N MAY	6900	3937.50	2962-
O JUN	6900	3937.50	2962-

```

LETTER TO EDIT (A-O)
X (CANCEL)          R (RECORD)
ENTER SELECTION

```

Figure 9-4. *The Home Accountant* budget screen tells the grim tale of the Lassiters' investment in Gannett. They've bought the stock in the midst of a nose dive. Each month they adjust the Actual column to reflect changes in price. The Budget column reflects the price they paid for the stock. *The Home Accountant* automatically figures the difference.

Apple and IBM didn't fare too well, either. Figures 9-5 and 9-6 are the Lassiter's Income and Expense Summaries for their first year in the stock market. Figure 9-7 is the asset portion of their Personal Balance Sheet. (The second page shows liabilities, but, since the Lassiters have none in these accounts, it's omitted here.) Since their budget figures reflect their original balances, they can measure their gains and losses for each account.

The best news—the only good news—is in the income statement, Figure 9-5. The Lassiters earned \$1,901 in dividends and interest for the year. In

Figure 9-6, they find that figure was offset by the initial \$290 in commissions they paid when they bought the stock, leaving a net cash income of \$1,611.

The most important measure of the Lassiters' year, however, is the status of their stock asset accounts, shown in Figure 9-7. They lost \$1,862 (38%) on Apple, \$1,312 (11%) on IBM, and \$2,962 (43%) on Gannett. Although the Lassiters have credited dividends to their asset management account, they reduced the net loss to \$872 on IBM (7%) and to \$2,834 on Gannett (41%). If the Lassiters had profited as they had hoped, dividends would have counted as part of their return. Even taking dividends and interest into account, however, the Lassiters lost \$4,525 on the year, or nearly 12% of their original investment of \$38,344.

INCOME & EXPENSE SUMMARY PRINT PERIOD ONLY FOR 12 MONTH(S) ENDED JUN 1984 INVESTMENTS AUG 13, 1984		
PAGE 1		
INCOME	JUN '84	PCT.
-----	-----	-----
APPLE DIVIDENDS	0	0.0
IBM DIVIDENDS	440	23.1
GANNETT DIVIDENDS	128	6.7
INTEREST	1333	70.1
	-----	-----
TOTAL INCOME	1901	100.0
	=====	=====

Figure 9-5. First, the good news. During the first year after opening an asset management account, the Lassiters received \$1,901 in dividends and interest.

INCOME & EXPENSE SUMMARY PRINT PERIOD ONLY FOR 12 MONTH(S) ENDED JUN 1984 INVESTMENTS AUG 13, 1984		
PAGE 2		
EXPENSE	JUN '84	PCT.
-----	-----	-----
COMMISSIONS	290	15.3
MISCELLANEOUS	0	0.0
	-----	-----
TOTAL EXPENSE	290	15.3
	=====	=====
NET INCOME	1611	84.7
	=====	=====

Figure 9-6. Brokerage commissions, seemingly modest in proportion to the cost of the Lassiters' stock, consumed 15.3% of the Lassiters' cash flow from their investments during the first year.

Herein lies a cautionary tale. In the season of the bear, you can take a beating even on a blue chip stock like IBM, or on a healthy, cash-rich company like Apple, even if it looks poised to make a lot of money on a product like the Macintosh. (At this writing, in early August 1984, six weeks after we've closed the Lassiters' books, IBM is back to 121, the Lassiters' break-even point, not counting commissions and dividends. Gannett is back up to around 46, so the Lassiters' loss would be cut to \$2,300 there, instead of nearly \$3,000. Apple, however, is still lollygagging around 29 or 30. No help.)

PERSONAL BALANCE SHEET COMPARE TO BUDGET FOR INVESTMENTS AUG 13, 1984			
PAGE 1			
ASSETS	JUN '84	BUDGET	DIFFER.
-----	-----	-----	-----
CASH			

CASH ACCOUNT #1	0	0	0
	-----	-----	-----
TOTAL CASH	0	0	0
CHECKBOOKS			

CHECKBOOK #1	16080	14469	1611
	-----	-----	-----
TOTAL CHECKBOOKS	16080	14469	1611
OTHER ASSETS			

APPLE COMPUTER	3013	4875	1862-
IBM	10788	12100	1312-
GANNETT	3938	6900	2962-
	-----	-----	-----
TOTAL OTHER ASSETS	17739	23875	6136-
	-----	-----	-----
TOTAL ASSETS	33819	38344	4525-
	=====	=====	=====

Figure 9-7. Sad tale of the Balance Sheet: The Lassiters' first year in the stock market cost them \$4,525, taking into account stock prices, brokerage commissions, dividends, and interest. They have entered their initial investments in the Budget column, to serve as a base line against which to measure their investments. In a better year, the appreciation in value of the stock, plus dividends, would be the measure of their return on investment.

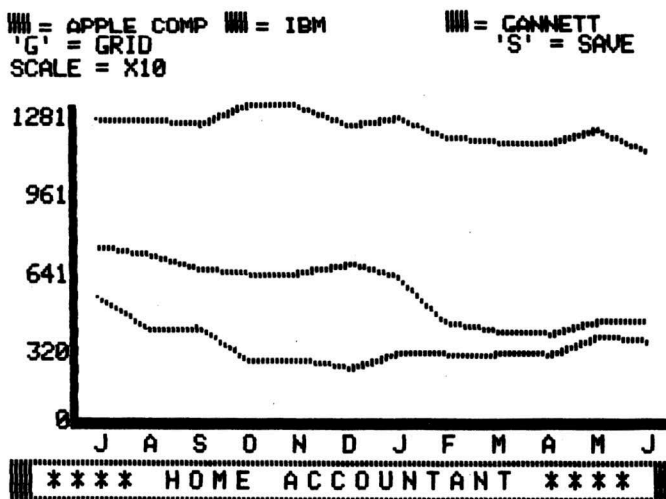
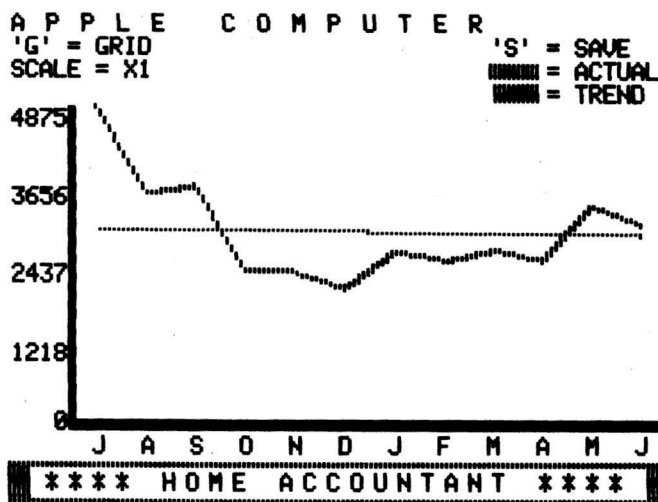


Figure 9-8. Home Accountant graphs show the downward trend of all three of the Lassiters' stocks.

The graphing module of *The Home Accountant* will help you plan your investments. Figure 9-8 plots the Lassiters' sad tale with a graph comparing the performance of their three stocks. The story looks even more dismal if you plot the stocks separately, so the program does not have to compress the

scale to accommodate the ranges of all three. Figure 9-9 is a trend chart of the fluctuations of the Lassiters' 100 shares of Apple stock. It shows the ups and downs more clearly than the composite graph. The trend line is encouragingly level, but investors shouldn't take *The Home Accountant's* trend lines too seriously. By some assessments, even a technical analyst's elaborate calculations of market trends are not meaningful projections. *The Home Accountant* merely tells you which way the line is headed. The calculation has nothing to do with the stock market.



?SYNTAX ERROR

Figure 9-9. *The Home Accountant* trend chart for the Lassiters' Apple stock looks reassuringly flat. Despite the stock's recovery, they have lost \$1,862 on the stock. Trend graphs may be useful in assessing your investments, but should be read with caution.

You can tinker around with the program to produce figures and graphs that suit your own purposes. If you buy more stock from the same company, for instance, your asset account will no longer accurately reflect the stock's market fluctuations. You can overcome this with a separate data disk for keeping track of market fluctuations. Just enter the market price in the Actual column of the budget screen. Additional manipulations can produce more illustrative graphs.

IBM stock, for example, looks virtually flat when plotted between 100 and 130, because *The Home Accountant* must compress the scale to reach that range. If you subtract 100 from the price, however, fluctuations become far more pronounced (Figure 9-10). This graph is, in effect, a small portion of a much larger one. You'll notice that charts of the Dow Jones Industrial Average and Standard & Poor's 500 are similarly truncated in financial publications.

The same technique allows you to compare a stock's fluctuations with those of the Dow (Figure 9-11) or S&P 500. Just set up a budget category for the market index and keep its level up-to-date, as if it were an asset account. (You wouldn't want to do this on your accounts disk, however. It would

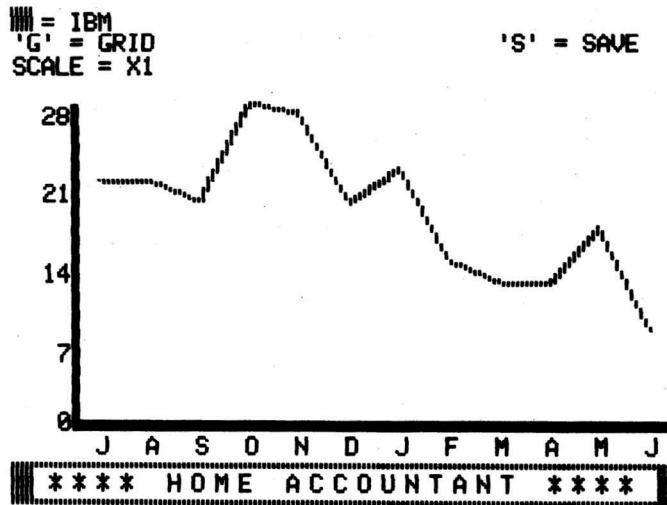


Figure 9-10. Fluctuations in IBM stock prices are much more clearly defined on an expanded scale. This graph is, in effect, a small part of a much larger graph, showing only the range above 100. It was made by setting up a separate data disk for keeping track of stock prices and subtracting 100 from IBM prices.

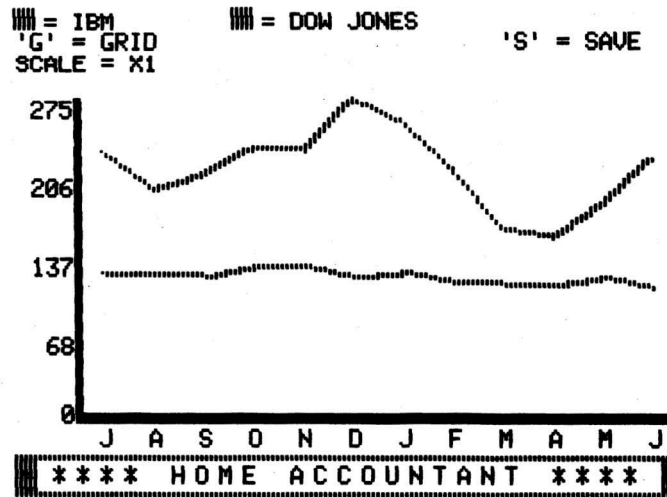


Figure 9-11. With a separate data disk for tracking stock prices, you can compare the performance of your stocks with market indexes. Here, IBM is compared with the Dow Jones Industrial Average, with 1,000 points subtracted to put it in the same range with IBM. The graph reflects IBM's basic stability in comparison with market swings.

seriously distort your balance sheet.) You also can compare price moves of two stocks that don't trade in the same range (Figure 9-12). If you graph IBM and Apple together with no modifications, both appear as almost straight lines because of the compression of the scale. Here, with IBM graphed at 100 points below its actual price, you can see that, for some reason, IBM rose as Apple was falling, then began falling as Apple began to recover. The graph doesn't tell you why.

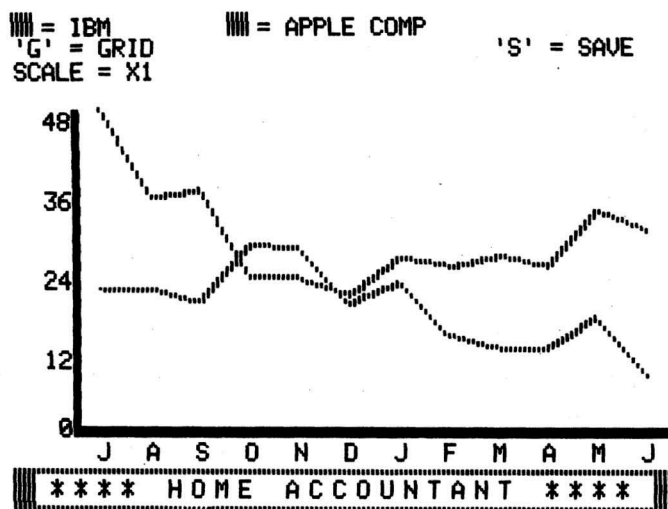


Figure 9-12. Apple vs. IBM. Subtracting 100 from IBM makes it possible to compare IBM's market movements with Apple's. For some reason, IBM and Apple have moved in opposite directions, with IBM peaking in the fall while Apple was bottoming out. The graph offers no clue as to why.

A Final Word

The computer's role in investment strategy is typical of computer-aided financial planning. The computer can't tell you when to get into the market and when to stay away. It can't tell you which stocks are about to spurt and which are dying. It doesn't know where interest rates are headed. Those are all judgments. Guesses might be a better word. The computer can't plan your future, but it can help you organize the basic data you need to tell where you're headed and to make judgments for yourself.

This book has covered a lot of ground—more, probably, than most people think about in an organized way on a continuing basis. The remarkable thing is that all of it grows fairly simply out of routine bookkeeping on *The Home Accountant*, with an occasional assist from *The Tax Advantage*.

If you don't know what your net worth was last year, it's hard to tell whether you're moving ahead. If you don't know where your money's going, you can't tell whether you're frittering it away on nonessentials at the expense of more important goals, be they BMWs or education and retirement. A vague sense that income exceeds outgo may leave you far short when the time inexorably arrives for the kids to go to college or for you to retire on a fixed income. A general awareness that inflation is eroding the 10% interest you're earning in your bank money market account is not the same as realizing that your actual return is 3%, after inflation and taxes, or that the million dollars you figure to accumulate in your IRA will really be more like \$100,000, in today's dollars. Recognition that taxes are painful is not the same as discovering that, literally, half the next raise will go to your state and federal governments.

Information is control. Both come with a surprisingly small investment of time, if you have a computer and *The Home Accountant*. Keeping systematic

records is not a great deal more trouble, really, than balancing your checkbook.

At the beginning of this book, we met George Washington Vanderbilt, a man born to wealth and bent on emulating the barons of the Loire. He was the grandson of Cornelius Vanderbilt, the robber baron who earned the family fortune and supposedly kept his books in his head.

A computer is a pale substitute for the robber baron's rapine instincts, but it gives you a fair shot at keeping better books than he did.

Rules of Thumb and General Advice

1. Buy low, sell high. (If you could figure out how to do that, you wouldn't need any more financial advice about anything.)
2. Invest, don't speculate. Small-time market players usually lose more than the indexes when the market goes down and gain less when it rises.
3. Diversify.
4. Don't invest money you can't afford to lose. And don't invest money you may need on short notice; you may be forced to sell at the worst possible time.
5. Don't "churn" your portfolio. Constant trading in small lots will generate an insurmountable deficit in brokerage commissions.
6. View your broker's advice with caution. It's not clear that brokers are much better at foreseeing the future than anybody else. And remember, a broker is a salesperson first.
7. Match your investment strategy to your financial objectives and tolerance for risk. Are you seeking long-term capital gains, current income, or liquidity and safety?
8. Opportunities in stocks and bonds are greatest, and long-term risks the least, when the market is muddling along in a trough. Opportunities are the smallest and risks the greatest near market peaks.
9. Mutual funds offer diversification and professional management. They tend to be set in their ways, however, so those that do best in a bull market tend to fare worst during declines. More conservative funds tend to be more stable.
10. Stay away from options, futures, commodities, buying on margin, and shorts (stock trades, not underwear). You can lose your shirt.
11. Consider a family of funds that allows you to switch from one investment strategy to another as conditions change.
12. Load mutual funds charge a commission. No-load funds don't. That's the only difference. Shop for a no-load.
13. Bonds, once a safe, stodgy investment, are now prey to wildly fluctuating interest rates. You can reduce risks with bond funds, unit trusts, and older discounted, low-yield bonds.
14. Tax-exempt bonds are worth considering for anyone above the 30% tax bracket. The higher your bracket, the more attractive municipals become.

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